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ABSTRACT

THIS ANNUAL SUMMARY PROVIDES INFORMATION ABOUT RESEARCH PROGRAMS WHICH HAVE BEEN DEVELOPED AND ADMINISTERED BY THE OFFICE OF MANPOWER RESEARCH TO JUNE 30, 1969. THE FIRST SECTION CONTAINS DATA ABOUT ALL PROJECTS IN PROGRESS AT THE END OF THE 1969 FISCAL YEAR. SECTION 2 CONTAINS BRIEF SUMMARIES OF RESEARCH PROJECTS COMPLETED DURING THE YEAR AND SECTION 3 IS A CUMULATIVE LIST OF ALL MANPOWER DEVELOPMENT AND TRAINING ACT RESEARCH COMPLETED SINCE THE ACT WAS PASSED. THE LAST PART OFFERS GUIDELINES FOR THE SUBMISSION OF RESEARCH PROPOSALS TO THE MANPOWER ADMINISTRATION. (BC)

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MANPOWER RESEARCH PROJECTS

SPONSORED BY THE
U.S. DEPARTMENT OF LABOR,
MANPOWER ADMINISTRATION

Through
June 30, 1969

1969

U.S. DEPARTMENT OF LABOR
MANPOWER ADMINISTRATION

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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INTRODUCTION

Fiscal year 1969 marked the seventh year of the research program established under title I of the Manpower Development and Training Act (MDTA) to guide and help perfect programs for better utilization of the country's manpower resources. In the past 3 years, this research has been supplemented by a program of studies under the Economic Opportunity Act. Another research program was instituted this year in support of the Social Security Act (SSA). All of these research programs have been developed and are administered by the Office of Manpower Research in the Manpower Administration, under the leadership of the Associate Manpower Administrator. This catalog describes the content and status of these programs on June 30, 1969.

Individual research projects are conducted, through a system of contracts and grants, by investigators representing the major social science disciplines—sociology, economics, industrial relations, psychology, political science, social work, and anthropology—as well as the fields of business administration, engineering, and education. Most of the researchers are affiliated with universities; the remainder work for government agencies or private research organizations.

The more extensive research projects under MDTA and all projects under the EOA and SSA are conducted under contracts. MDTA research grants support three types of projects: (1) Institutional grants to develop new manpower research talent and long-term programs of research on local and regional manpower problems; (2) small grants to doctoral candidates to support research for dissertations in the manpower field; and (3) small research grants to postdoctoral scholars for innovative studies and the development of research designs for major studies of manpower problems.

Projects in progress at the end of fiscal year 1969 under all of these programs are described in section 1 of this publication. Information is included on projects carried over from earlier years, including the seven institutional grants, and on the 16 MDTA contracts, 17 EOA and SSA contracts, 40 dissertation grants, and 11 research project grants which were newly funded during the year.

Brief summaries of research completed during fiscal 1969 comprise section 2, and a cumulative list of reports completed since the inception of the MDTA research program is given in section 3.

Finally, section 4 presents guidelines for the submission of research proposals to the Manpower Administration. It is included in the hope that social scientists will want to add to the significant contributions recorded in the previous sections of this catalog.

FOR FURTHER INFORMATION ON MANPOWER RESEARCH

1. Requests for information concerning active projects should be directed to the principal research staff.

2. See section 3 for a listing of reports that have been completed since 1963 under the research programs described in this volume and for information about how these reports may be obtained. PLEASE DO NOT WRITE TO THE MANPOWER ADMINISTRATION FOR COPIES OF THESE REPORTS WITHOUT CONSULTING THE LISTING IN SECTION 3. THOSE FOR WHICH THE SOURCE OF COPIES DOES NOT INCLUDE AN "MA" DESIGNATION CAN BE OBTAINED **ONLY** FROM THE ALTERNATIVE SOURCES LISTED.

SECTION 1. PROJECTS ACTIVE ON JUNE 30, 1969

This section outlines the objectives and procedures of projects on which research was in progress at the end of fiscal year 1969. Reports include work being carried out on research contracts, manpower research institutional grants, doctoral dissertation grants, and research project grants under the Manpower Development and Training Act and research contracts under the Economic Opportunity Act and the Social Security Act.

1.1 PROJECTS ACTIVE ON JUNE 30, 1969—Research Contracts Under the Manpower Development and Training Act (MDTA)[1]

1.1.01 ASSOCIATION FOR THE HELP OF RETARDED CHILDREN
NEW YORK, N.Y.

CONTRACT NO. 81-31-21

Principal Staff: Ida Alpert, Jack Tobias, and Dr. Jacob Cohen, New York City Chapter

Project Title: The Employment of New York City's Mentally Retarded Adults

Objectives and Procedures: This study analyzed: (1) The school records of all persons who completed special education classes for retarded students in New York City in 1960 and 1963; (2) the current employment status of a sample of 500 of these persons; (3) their employment patterns since leaving school, in terms of stability, job categories, earnings, and methods of placement; and (4) their use of public and voluntary agencies in jobseeking efforts. Those in the sample were interviewed at home, and psychological evaluations were made of selected subgroups. The aim of the study was to develop information that can be used to enhance retardates' chances of finding jobs.

Status of Project: Completion is scheduled for September 1969.

Highlights of Preliminary Findings: The analysis of school records suggested that a large percentage of retarded children were not so identified during their school years, and many children whose IQ's were identified as being in the retarded range remained in regular classes. By contrast, about twice as many Puerto Rican children as expected were found in classes for the retarded, apparently because their teachers tended to interpret certain correlates of low socieconomic status, such as weakness in verbal comprehension, as symptoms of retardation.

Thus, among the groups that were retested for this study, a far larger proportion of Puerto Rican than of either white or Negro youth achieved IQ scores in the normal range.

Survey results suggested that the retarded are typically members of unstable families, raised in poverty. Most of the retarded youth were from welfare families often lacking one or both parents. Family contact with the courts was frequent.

The survey provided firm evidence that the retarded are employable. Approximately 60 percent of the young men worked in competitive employment in a wide range of occupations, although at low wages and in small firms. However, only 30 percent of the women worked in competitive employment at the time of the survey. The families of the women were often overprotective, and many jobs which retarded workers can do are open only to men.

The lack of adequate education, training, and general work preparation, as identified by the survey, was thought to account in large measure for the high proportion of retarded persons unemployed or outside the work force altogether, although capable of employment. Far fewer retardates were receiving special education in the school system than could benefit from such programs, and most retarded individuals, it was found, did not take advantage of State rehabilitation services.

Typically, once the retarded youth left school, neither he nor his family knew where to turn for help in learning or finding a job.

1.1.02 BATTELLE MEMORIAL INSTITUTE
COLUMBUS, OHIO

CONTRACT NO. 81-37-68-40[2]

Principal Staff: Ronald J. Cress

Project Title: An Exploratory Study to Analyze New Skill Content in Selected Occupations in Michigan and the Mechanism for Its Translation Into Vocational Education Curriculums

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[1] Requests for information concerning these contracts should be directed to the principal staff.

[2] This study is cosponsored by the Office of Education of the U.S. Department of Health, Education, and Welfare; the Michigan Employment Security Commission; and the Michigan State Department of Education.

Objectives and Procedures: This study intends to make curriculum planning for vocational education more responsive to changing job skill requirements, and to improve the mechanisms by which such changes are detected and translated into vocational school curriculums.

Through interviews with employers, employees, and members of advisory committees in three Michigan cities, current and prospective job content and skill requirement information is being gathered for 10 occupations associated with economic growth.

Curriculums designed for these occupations are being analyzed, in order to identify areas where changes are needed. The researchers will work with school officials to implement the recommended changes.

Status of Project: Completion is scheduled for March 1970.

1.1.03 BUREAU OF SOCIAL SCIENCE RESEARCH, INC.
WASHINGTON, D.C.

CONTRACT NO. 81-09-66-27

Principal Staff: Mrs. Laure M. Sharp

Project Title: Occupational Adjustment of Recent Low-Income Southern In-Migrants to Cleveland

Objectives and Procedures: This three-phase project concerns the occupational adjustment in Cleveland of low-income southern in-migrants with less than 2 years, and 2 to 5 years, of residence. The project integrates research with an experimental program sponsored by the Manpower Administration's Office of Special Manpower Programs.

In phase I, the researchers identified 1,600 low-income southern newcomers to Cleveland and interviewed them for information on their occupational adjustment. For comparison, a sample of 400 Cleveland residents of more than 10 years was also interviewed.

In phase II, the experimental element, the researcher referred selected recent in-migrants to the PEACE (Programs for Educational and Cultural Excellence) Skill Center program for special services, including prework orientation, job placement, and/or referral to MDTA training, to assist them in entering urban employment and community life.

In phase III the researcher is making longitudinal examination of the conditions generating individual changes in work status and urban adjustment. An attempt is being made to reinterview the entire sample of 1,600 in-migrants, as well as the long-term Cleveland residents originally interviewed.

Interviews focus on their social, cultural, urban, and economic adjustment experiences, with special emphasis on past and current employment, changes in occupational aspirations, adjustments to city life, and particularly the impact of the skill center programs in facilitating assimilation of those enrolled.

Status of Project: The data collected during phases I and II are being analyzed, and a final report is expected in December 1969. Work on phase III of the project is underway.

Highlights of Preliminary Findings: Interim reports on phase I of the project indicated that low-income newcomers to the city generally had more education and training skills than did long-term low-income residents. Negro newcomers had more education, were younger, and more often unmarried than their white counterparts, but whites held more skilled and higher paying jobs. Men, both white and Negro, were better off in Cleveland than women.

The chief reason reported for moving was economic; i.e., jobs and wages. Yet most of the newcomers' (white and Negro) first jobs in Cleveland were as operatives (men) or in clerical and sales positions (women). This occupational pattern had not changed by the time of the survey. Negro men were still predominantly in operative occupations but a number of white men had advanced into craft occupations or jobs as foremen. Most of the newcomers felt they were better off as a result of moving to Cleveland.

1.1.04 UNIVERSITY OF CALIFORNIA, BERKELEY
BERKELEY, CALIF.

CONTRACT NO. 81-05-66-30

Principal Staff: Dr. E. R. F. W. Crossman, Institute of Engineering Research, and Dr. Stephen Laner, Institute of Industrial Relations

Project Title: The Skill Demands of Manufacturing and Service Processes at Various Levels of Technology

Objectives and Procedures: This study builds on the researchers' pilot study (see **3.1.10**) of differences in the distribution of skill levels of the work force in banking, steel, and aerospace firms operating at different levels of technology. The present study extends the analysis of the relationship between human and machine functions to other manufacturing and service industries, covering both direct (production) and indirect labor, including supervision in maintenance, planning, scheduling, quality control, and junior management.

Status of Project: Completion is scheduled for October 1969.

Highlights of Preliminary Findings: The study suggests that the extent and pace of technological change appear to be constrained by considerations of manpower supply. The most critical shortages were found in routine operation and maintenance occupations connected with computer-based technology, for which industry could neither count on recruiting enough skilled personnel nor undertake the necessary long-term training programs.

1.1.05 UNIVERSITY OF CALIFORNIA, BERKELEY
BERKELEY, CALIF.

CONTRACT NO. 81–05–67–24

Principal Staff: Dr. Margaret S. Gordon and Dr. Margaret Thal-Larsen, Institute of Industrial Relations

Project Title: Employer Policies in a Changing Labor Market—The San Francisco Bay Area Employer Policy Survey, 1967

Objectives and Procedures: This study—a part of a broader program on labor market research—is an extensive analysis of employer policies and practices in the light of postwar changes in the labor market of six counties in the San Francisco Bay area. Basic data were obtained in interviews with a random sample of 309 establishments, representing all major industry divisions (including government), which had at least 100 employees each and together accounted for 20 percent of the area's employment. These employers were queried on the volume and composition of employment; the location of establishments; the incidence and impact of technological change; the structure of industrial relations and personnel departments; their policies concerning recruitment, selection, promotion, training, and wages; and their labor turnover.

Status of Project: A partial preliminary report has been received and the complete final report is to be submitted in August 1969.

Highlights of Preliminary Findings: About 85 percent of the establishments had made at least one of the following changes between 1960 and 1966, and about half had made at least three such changes: Built a new plant; remodeled a plant; installed new equipment; modernized equipment; significantly changed operating procedures; eliminated inefficient working arrangements; or changed materials used in the production process. There was some evidence that establishments which had been locally owned had sold a controlling interest to a larger corporation with headquarters elsewhere as the only way of financing modernization. Moreover, among establishments with less than 250 employees, single-unit establishments were considerably less likely to be involved in varied types of technological change than branch or headquarters units. Hence, the researchers recommended that research on technological change and associated occupational shifts should take explicit account of the influence of organization type.

Shifts in the occupational composition of employment were more likely than changes in the volume of employment to be attributed to technological change. These changes were more usually reported to involve upgrading than downgrading of skills, especially when new electronic data processing equipment was installed, and frequently entailed a brief period of informal on-the-job training.

Outservice training was, however, by far the most prevalent type of formal training sponsored by the establishments. Very little of the formal training was designed for new employees, and MDTA on-the-job training played a relatively insignificant role in the establishments surveyed. The largest establishments were clearly most involved not only in training but also in hiring workers who had participated in Government-sponsored training or work-experience programs. Thus, the trend toward industrial consolidation may have favorable implications for the success of manpower programs to expand training and employment opportunities for the disadvantaged in the private sector.

Paradoxically, however, the larger establishments, especially government agencies, were considerably more likely to impose formal selection standards (educational requirements and the use of selection tests, for example) which tend to screen out the disadvantaged. This tendency was mitigated somewhat by the greater flexibility in standards exhibited by the large firms; they were less likely than small firms to impose an absolute ban on hiring persons with police records or to express reluctance to hire mothers with child-care responsibilities.

Central-city establishments were distinctly more likely to report comparatively high standards for entry-level jobs than suburban establishments, suggesting that the supply of applicants for such jobs is relatively larger in relation to demand in the central city than in the more outlying areas.

High qualification standards tended to be associated both with relatively high wages for white-collar workers and with the provision of formal on-the-job training. Both of these tended to characterize a group of "elite" firms that were leaders in personnel practices, but only the provision of training was clearly related to the larger firms.

Success in recruitment, outside of shortage occupations, also tended to be associated with comparatively high entry standards and to be attributed to such factors as the generally "good reputation" of the establishment as a place to work. There were some indications that difficulties in recruiting unskilled and semiskilled workers were found chiefly in areas which were partially or to a considerable extent unlikely to provide a suitable supply of housing for such workers.

Formal recruitment channels were relatively more important than most other surveys have suggested. Many small- and medium-sized establishments that were obliged to hire through unions used the union as a substitute for a personnel department in screening recruits. Moreover, the more specialized the education or training required in a given occupation group, the more likely that formal channels or recruitment were used. The direction of occupational trends suggested to the researchers that formal channels are likely to become more important, and their data indicated that the chief beneficiaries of this trend are likely to be the school and college placement services and the private employment agencies, rather than the public employment agencies and the unions.

Substantial wage differentials were found within the San Francisco Bay area, but the geographical pattern varied for different types of workers. In the case of service workers, for example, wage rates appeared to be lower in areas with large minority group populations and higher in certain outlying areas with a white working-class residential pattern, whereas the highest blue-collar rates tended to be found in the area which had historically been the center of heavy industry and which seemed to be characterized by particularly strong local unions. The researchers concluded that the relatively high rates in the Bay area, in comparison with other areas, may have hastened the process of technological change and the apparently related phenomenon of the buying up of locally owned single-unit establishments by larger regional or national organizations.

1.1.06 UNIVERSITY OF CALIFORNIA, BERKELEY
BERKELEY, CALIF.

CONTRACT NO. 81-05-68-43

Principal Staff: Dr. Lloyd Ulman, Dr. Margaret S. Gordon, and Dr. Margaret Thal-Larsen, Institute of Industrial Relations

Project Title: Employment Agencies and School Placement Services in a Large Metropolitan Labor Market

Objectives and Procedures: This study investigates: (1) The impact of increased national emphasis on manpower programs on the relative roles and effectiveness of public and private employment agencies and placement services; and (2) the relationships between employment agencies and educational institutions, particularly in the development, transmission, and use of information on occupational changes in the planning of vocational education and training programs. Data are being collected by questionnaires sent to the public employment service, private placement services, and counselors in secondary schools and junior colleges in the San Francisco Bay area. The questionnaires were developed under a planning grant from the Manpower Administration (see **2.3.02**).

Status of Project: Completion is scheduled for December 1969.

1.1.07 UNIVERSITY OF CALIFORNIA, LOS ANGELES
LOS ANGELES, CALIF.

CONTRACT NO. 81-04-36

Principal Staff: Dr. Paul Prasow and Fred Massarick, Institute of Industrial Relations

Project Title: Automated and Nonautomated Jobs in the Los Angeles Aircraft Industry

Objectives and Procedures: This longitudinal study examines the entrance requirements and selection policies of management in the Los Angeles aircraft industry in regard to automated and nonautomated jobs. It also investigates how workers in both kinds of jobs regard job requirements and job content, sources of work satisfaction, and relationships with fellow workers and supervisors. Data have been collected from interviews with the workers, their supervisors, and top-level managerial and staff personnel concerned with automation and technological change.

Status of Project: Completion is scheduled for July 1969.

Highlights of Preliminary Findings: The researchers' findings and conclusions include:

1. Among those interviewed there was no general agreement on the meaning of the terms "automation" or "automated jobs"; but many did agree that automation, however defined, resulted in less control over equipment and work operations, more demand for alertness and attention on the job, and a need for additional training.

2. "Most employees interviewed did not look upon automation as a threat to their jobs. On the contrary, a large group perferred automated to nonautomated jobs."

3. Concerning the transition from nonautomated to automated employment, ". . . There is general agreement that the transition represented a major change . . . a relearning process is experienced."

4. All respondent groups in automated jobs perceived ". . . increases in their levels of skill and responsibility and in the extent to which their jobs require communication."

1.1.08 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

CONTRACT NO. 81-34-67-25

Principal Staff: Dr. Eli Ginzberg, Conservation of Human Resources Project

Project Title: Employment Expansion in a Dynamic Economy—A Series of Related Studies

Objectives and Procedures: This continuing project of interdisciplinary research studies probes deeply into the changing structure and functioning of American society to determine the different ways in which the development and use of the Nation's human resources affect the level of social well-being and economic output. Members of the research team conduct intensive studies of problem areas as a basis for recommending remedial action.

Status of Project: Since the project was initiated, eight studies have been completed (see **3.1.16-17, 3.1.19-24**). The three completed during fiscal year 1969 are summarized elsewhere in this volume (see **2.1.05**). Thirteen studies on which work is still in progress are described below. (For ease of reference, the customary format of separate headings for objectives and procedures and preliminary findings, if any, is not followed in this presentation below.) The first three studies enumerated below are scheduled for completion during fiscal year 1970; the other 10, during later years.

Research in Progress:

1. "The Hard-to-Employ in Western Europe: Policies and Programs." Lowered unemployment in the United States in recent years has illuminated the

conditions of hard-to-employ groups and raised questions on the best measures to identify their potential and maximize their employment. To help find answers, this study has analyzed the experience of Western European countries, where persistently tight labor markets have minimized residual unemployment and where government has adopted special programs to restrict the expansion of hard-to-employ groups.

It was found that labor market specialists in Western Europe believe that labor supply and demand do not automatically adjust through market action, and hence direct a whole series of policies toward maintaining employment and anticipating unemployment of vulnerable workers. The groups that make up the hard-to-employ or hard-to-reemploy—primarily those with physical, mental, and social handicaps—are not as large proportionately as in the United States. These groups are covered not only by the umbrella of protection given all workers, but also by special measures to limit or prevent their unemployment. Such measures include: (1) Legal protections against dismissal often with provisions favoring the hard-to-reemploy; (2) advance notice of proposed dismissals of groups of redundant workers in order that jobs can be found before unemployment sets in; (3) job creation for the hard-to-employ outside the ordinary placement procedures, including sheltered workshops and direct placement on public works projects; (4) admission of employed workers about to become unemployed into training and retraining courses (in the case of older workers subject to dismissal, special retraining programs with a government allowance to the employing firm); (5) direct subsidy for a period of time to the hard-to-place worker if his new job provides less wages than the old one; (6) a special pension for discharged workers and redundant farmers close to retirement age to induce early withdrawal from the labor market; (7) identification and development of small areas of potential economic growth, and new approaches to the relocation of industries in these areas, such as the placing of small factories amid small family farms; and (8) the promotion and maintenance of uniform standards of public services (education, housing, welfare, recreation, health, and community organization) to inhibit the expansion of disadvantaged groups—school dropouts, alienated persons, minorities, illiterates, etc.

2. "The Metropolitan Economy: Employment Expansion." This study analyzes metropolitan labor markets in the United States through the use of employment data (grouped into 32 industrial classifications) from the 1940, 1950, and 1960 censuses. Instead of following conventional procedures of netting out job creation and job destruction, the analysis keeps the two processes separated, to stress the specific forces that lead to expansion and contraction in each market. The key methodological advance is linking the analyses of size and structure to the typology of cities; i.e., nodal, manufacturing, government, health-education, recreation, or mixed.

Among the surprising findings were the relatively modest role that services appear to play as the initiator of employment expansion, the critical importance of agglomerative activities as providing the best environment for growth (nodal cities), and the strong growth of metropolitan centers in which manufacturing activities predominate. The data underscored the need for job training and job creation efforts to be planned locally and integrated into State and national plans if manpower programing is to be effective.

3. "Men, Money, and Medicine." This study is a collection of 20 essays written during the past few years dealing with critical health occupations and their workers, including physicians, psychiatrists, obstetricians, nurses, public health workers, and medical technicians. The analysis focused on the ways in which such groups of workers are educated, trained, and utilized. Special efforts were made to relate the operations of health service to the larger job market and to delineate this interdependence.

Innovative and improved manpower utilization in the health services industry was shown to be difficult because of the absence of a strong entrepreneurial structure and the hyperprofessionalization that characterizes the industry. Attention was called to the dangers of expanding expenditures for services without increasing capacity for manpower training.

The study stressed the need for competitive wages and career ladders for the approximately 2 million nonprofessional health service employees. Specifying high priority needs (i.e., improved health services for the urban poor) and attempting to modify institutional structures to meet these needs were seen as preferable to mounting comprehensive programs for altering the entire structure of medical care.

4. "State Development Efforts to Expand Employment." Against the background of theories of regional economic growth, this study examines the potentialities and limitations of State development commissions in

their efforts to expand and promote economic development. The study identifies and evaluates the effectiveness of two basically different approaches in this area—planning and promotional activities.

The researcher concluded that many State development commissions are ineffective, and that many of the measures used to stimulate industrial growth (such as tax-free bonds) have severe limitations. However, it was emphasized that the commissions can, under strong State leadership, achieve their purpose by functioning as the principal State planning agency for directing and encouraging economic and employment growth. Stressing the planning function would provide criteria for assessing the desirable levels and alternatives for State investments in highways, education, and other necessary State functions. The study pointed out that the existence of a strong State effort often serves as a catalyst to energize the private sector and thereby results in a greater overall effort.

5. "The Dynamics of Opportunity." This study seeks to delineate the probable major changes in the extent of employment opportunity in the American economy during the next decade. It examines such factors as the location of low-wage industries, the determinants of demand for skilled workers, the heightened employment of women, and organizational variables such as franchise, leasing and contracting out, mergers, and conglomerates.

Recent trends toward a growing proportion of low-wage jobs (jobs for women in the service sector) suggested to the researcher that concern with occupational mobility be broadened to family mobility based on combined earnings. The researcher found further support for this view in the dual channels of mobility—educational preparation and job progression—because the latter offers special opportunities for workers whose families are well-established in the labor market.

6. "Aging in the Ghetto." This study probes the interrelationships of the processes of aging—the multiplication of health defects, the difficulties of access to job market information, and the impediments to access of social services. It also examines how these processes contribute to loosening ties with the world of work for minority group members to a point where they drop out of the labor force.

The researcher found that older men are most likely to drift out of the labor force if they have no close family ties and responsibilities, if they do not have a full-time, full-year job, or if they are recent migrants into an urban ghetto. Their tendency to withdraw early, it appeared, may be accentuated if sources of income are available through quasi-legal or nonlegal sources or through welfare.

7. "Manpower Planning and Technological Change: The Steel Industry." This study is collecting case materials relating to the introduction of new technology in the steel industry over the last 15 years, especially the forecasting of manpower requirements and the development of hiring policies to insure a work force with needed new skills. The emphasis is on skilled workers, executives, professionals, and technical personnel who move up to a higher level in the transition to a new technology.

The initial analysis suggested that since management finds it very difficult to forecast the precise nature of the new skills that will be required, it hires people with the potential for acquiring skills, rather than those with developed skills.

8. "Growing Up in a Desegregated World." This study seeks to determine how growing up in a desegregated military environment affects the educational and career objectives of the children of Negro noncommissioned military officers (NCO's). The educational experiences and goals, work experience and expectations, social relationships, sources of income, and other characteristics of the children of Negro NCO's in the Air Force are being compared with those of the children of white Air Force NCO's and the children of Negroes at the same socioeconomic level of civilian life.

The assumption of a matriarchy in Negro families has not been borne out in the data for military families. Negro NCO's were found to be the heads of their families and to influence the decisions of their children.

The researcher has found it hard to distinguish the advantages of desegregation per se from the broader opportunities of military life, particularly in service overseas where desegregation is most pronounced. Moreover, the researcher observed, Negro adolescents are caught up in counterpulls between integration and isolation as a result of the Black Revolution.

9. "Quasi-Metropolitan Labor Markets." This study seeks to assess the role of the small city in regional economic development, including its part as a transition point for workers migrating from rural to urban areas. A typology of small cities is being developed to distinguish those with the potential for growth.

Particular attention is being paid to the way in which various features of the small-city job market—opportunities for seasonal industrial jobs, and workers' access to jobs via transportation and information, for example—prepare certain workers for the definitive move to the city.

10. "The Transition from School to Work: American-European Contrasts." In this study, the procedures and practices surrounding the transition of youth from school to work in four European countries (France, the Netherlands, Sweden, and Great Britain) are being analyzed in an attempt to discover those which might be appropriate for the United States. The analyses cover trends in population, labor force participation, school attendance, employment patterns (including apprenticeship and training), unemployment, wage differentials, and minimum wage regulations. In addition, qualitative material is being assembled on job changing, school work programs, housing provisions for young workers, special problems of minorities, guidance facilities, etc. Corporate officials who hire youth with modest educational preparation are being interviewed, with particular attention to employment of minority group youth and youth in depressed areas.

Preliminary examination of the data suggested several reasons for the much lower rate of unemployment among youth in Europe: a shortage of manpower, particularly highly skilled workers, which is partly due to the less sophisticated state of technological development; institution of methods to absorb young people into employment at low-wage rates; and less reliance on combined work-study arrangements.

11. "Employment Expansion and Metropolitan Trade." This study focuses on the sources of employment expansion in metropolitan job markets resulting from exports, import substitutions, and increased local demand for goods and services. Changes in the industrial mix of imports and exports are analyzed, as well as the associated changes in the composition of employment, using census data for 1940, 1950, and 1960 on 31 industrial classifications. The analysis of trends in the export base (including services as well as commodities) and the calculation of its multiplier effect are critical new methods for estimating employment prospects and planning appropriate training programs.

About 75 percent of all expansions in employment were found to be accounted for by the export base. It appeared that metropolitan economies, as they become larger, become self-sufficient but their exports continue to be a central influence on further growth.

12. "The Theory of Manpower." The central theme of this study is that the expansion of the "stock of skills" determines the increase in the standard of living of the population, and that the rate at which this stock expands is governed by the society's value orientations, political cohesiveness, economic organization, and human resource capabilities. Each of the foregoing is analyzed in terms of its principal components. A similar analysis stresses the specific institutions that determine the development of manpower—the family, the church, the schools, the military, and the employing organizations. The latter analysis can illuminate both the class structure and the distribution of income. Attention is focused on the facilitating mechanisms: job information, selection, assignment, and on-the-job training.

The theory propounded in this study helps to point up the serious costs of a "loose labor market": (1) When people are unemployed or employed below their skill levels, their labor is perishable; (2) the fall in income impedes skill acquisition; (3) the lower expectation of finding a suitable job deters potential members of the labor force from seeking work and discourages workers from acquiring additional preparation; and (4) employers have little incentive to economize in the use of skills.

13. "Changes in Mid-Career: Return to School" (with Russell Sage Foundation). This investigation explores the use that middle-aged persons make of professional or graduate schools to shift or advance in their occupations, with emphasis on the circumstances leading these people to return to school. Data have been collected, through interviews and questionnaires, from university officials and middle-aged students.

Although admission offices were found to try to restrict the acceptance of older students, 6.7 percent of all graduates were shown to be over 35. In schools of social work and library services, the figure approached 20 percent. Graduate programs in the humanities, social sciences, and business had an above-average proportion of older students. There did not appear to be a "typical" older student. Most had little difficulty in reentering the labor market because they were either on leave of absence or were preparing for an occupation where manpower is scarce.

1.1.09 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

CONTRACT NO. 81–34–68–44

Principal Staff: Dr. Eli Ginzberg, Conservation of Human Resources Project

Project Title: Negro Youth: Pathways Into Work

Objectives and Procedures: This study seeks to explain why Negro youth are more successful in entering the world of work in some communities than in others. Basic data are being obtained from the Departments of Commerce, Labor, Defense, and Health, Education, and Welfare; the Bureau of the Budget; and from local schools for the 30 largest cities and 16 low-income neighborhoods in these cities for 1960 and 1966. From these data, measures are being constructed of: The employment and unemployment experiences of Negro youth and the labor force as a whole; the educational achievement and performance of the youth on the Armed Forces Qualifying Test battery; differentials in labor force participation by sex and color; the extent of poverty; the extent and nature of in-migration; the demand for labor (including such factors as wage rates); welfare expenditures; and Federal expenditures on manpower programs. In addition, Negroes between the ages of 18 and 24 who are neither full-time students, employed full time, nor members of the Armed Forces, are being interviewed about their work history, educational attainment, work expectations, sources of income, and living arrangements.

Status of Project: Completion is scheduled for September 1970.

1.1.10 CORNELL UNIVERSITY
ITHACA, N.Y.

CONTRACT NO. 81–34–68–39

Principal Staff: Dr. William F. Whyte, Dr. David Rogers, and Dr. Jay Schulman, New York State School of Industrial and Labor Relations

Project Title: Exploratory Study of Interorganizational Relationships of Inner-City Manpower Programs

Objectives and Procedures: This study assesses the state of knowledge of organizational concepts and theories and attempts to identify those that offer promise for understanding and coping with problems that stem from the relationships among organizations having responsibilities for manpower programs. It also diagnoses the major problems of organizational relationships observed in field observation of such programs in New York City, Cleveland, and Philadelphia.

Status of Project: A summary of findings and bibliography are scheduled to be completed in November 1969.

Highlights of Preliminary Findings: Based on the findings of this exploratory study, further research has been undertaken to develop a conceptual scheme and to recommend organizational techniques and arrangements that will improve the efficiency and effectiveness of manpower programs (see **1.1.36**).

1.1.11 EDUCATIONAL TESTING SERVICE
PRINCETON, N.J.

CONTRACT NO. 81–32–69–03

Principal Staff: Dr. Benjamin Shimberg and Dr. Barbara Esser

Project Title: Impact of Licensing on the Supply and Mobility of Skilled Manpower in Selected Nonprofessional Occupations

Objectives and Procedures: This study is an intensive probe of the extent to which licensing procedures and requirements restrict entry into and mobility within selected nonprofessional occupations where manpower shortages have been reported—plumber, electrician, practical nurse, dental hygienist, clinical laboratory technician, barber, and cosmetologist. The study covers eight States (Alabama, Arizona, California, Florida, Illinois, New York, Oklahoma, and Texas) and 24 municipalities within those States. Information is being sought in interviews with licensing officials, vocational educators, union officials, officers of occupational associations, employers, and licensing applicants. Topics to be explored include: The structure and operations of licensing boards; licensing requirements (e.g., age, sex, education, training, citizenship, and work experience); the examination process; communication between licensing agencies and applicants; existing training resources; and costs of licensing.

This research, an outgrowth of a pilot study by the same researcher (see **3.3.09**), complements another current research project (see **1.1.26**). Together, the two studies are designed to yield information that can be used to make it easier for disadvantaged workers to enter licensed occupations while safeguarding legitimate public interests.

Status of Project: Completion is scheduled for July 1970.

1.1.12 BUREAU OF EMPLOYMENT SECURITY

(PRESENTLY U.S. TRAINING AND EMPLOYMENT SERVICE)
U.S. DEPARTMENT OF LABOR
WASHINGTON, D.C.

CONTRACT NO. 81–53–67–04

Principal Staff: Harold Kuptzin

Project Title: Development of a Model System of Occupational and Employment Information Under the Vocational Education Act of 1963

Objectives and Procedures: This pilot project intends to develop a model information system for occupational and employment data so that a State's vocational education agencies, employment services, and other offices may become more responsive to current and prospective job market requirements. Units of the Wisconsin State Employment Service and personnel of the national office of the U.S. Training and Employment Service (USTES) are executing the study in cooperation with representatives of national, State, and local vocational education agencies.

The model being developed utilizes various types of occupational and employment information, as well as data on labor demand for particular occupational groups in Milwaukee. These elements are being related to the basic factors affecting vocational education in the area and to vocational education curriculums. Particular effort is being made to develop effective techniques (especially for projecting occupational demand) and procedures for the exchange of information between the USTES and vocational education authorities at all levels of government.

Status of Project: Completion is scheduled for March 1970.

1.1.13 UNIVERSITY OF FLORIDA

GAINESVILLE, FLA.

CONTRACT NO. 81–10–68–34

Principal Staff: Dr. D. L. Brooke, Institute of Food and Agricultural Sciences

Project Title: The Impact of Mechanical Harvesting on the Demand for Labor in the Florida Citrus Industry

Objectives and Procedures: This study of the Florida citrus industry, which currently relies heavily on handpicking methods, is developing estimates of the rate at which capital equipment may be substituted for labor under various mechanical harvesting systems which are expected to become economically feasible within a few years. The economic efficiency of each system at specified levels of citrus prices, wage rates, and capital costs is being computed, and estimates are then being made of the probable impacts of mechanical harvesting on the demand for workers at different skill levels. The study also explores the possibilities of off-season employment for Florida citrus workers.

Status of Project: Completion is scheduled for February 1970.

1.1.14 GREENLEIGH ASSOCIATES, INC.

NEW YORK, N.Y.

CONTRACT NO. 81–34–68–27

Principal Staff: Dr. Hazel McCalley and Dr. Clara Friedman

Project Title: Developing a Model for Employment Services to the Handicapped

Objectives and Procedures: This study developed a model for the delivery of employment-related services to the handicapped. The analysis used data on: The number of potential candidates for services; the characteristics and needs of this population; the adequacy of current services to the disabled and the necessary and feasible adjustments; patterns in the delivery of services in the local community; and the reorganization and linkages between agencies needed for an optimum system. Data were drawn from National Health Survey statistics and other national or State surveys, a sample of case data from the files of vocational rehabilitation demonstration projects for the disadvantaged in Los Angeles and Atlanta, and depth interviews with the handicapped poor.

The relevance of the model was tested in Tacoma, Wash., and Baltimore, Md. In these two cities, personnel of government and private rehabilitation agencies and employers were interviewed concerning the dimensions of the problem of disability in the community, the characteristics of agency clientele, the types of services available and needed, and the customary patterns and processes in the delivery of these services.

Status of Project: Completion is scheduled for August 1969.

Highlights of Preliminary Findings: The findings reveal that the mentally ill or restored, the mentally retarded, and persons with severe and multiple handicaps were more likely to need extensive services to overcome obstacles to employment and are less likely to be served by the current programs. Although rehabilitation of the handicapped is hampered by their poor education, lack of job skills, and poor employment history, the major obstacle is the absence of a systematic procedure for providing them with the medical care and social and financial services that would enable them to attain satisfactory employment.

The model developed in this study included a network of services to the disabled to prepare them for employment and a system of analysis and manipulation of the environmental conditions of employment. The model attempts to correct shortcomings in existing rehabilitation services by providing components that: (1) Focus on improving the delivery of services; (2) emphasize reaching the target groups presently neglected; (3) establish job training as a more prominent aspect of the services; and (4) expand the concept of job development to encompass the analysis and redesign of jobs to make them suitable as well as feasible for those with various types of disability.

1.1.15 HARVARD UNIVERSITY
CAMBRIDGE, MASS.

CONTRACT NO. 81-23-66-22

Principal Staff: Dr. Peter B. Doeringer and Dr. Michael Piore, Department of Economics

Project Title: Internal Labor Markets and Manpower Analysis

Objectives and Procedures: This study analyzes the operation of the internal job markets in manufacturing firms, taking into account blue-collar skill scarcities, employment of the disadvantaged, technological change, and manpower forecasts, to provide a basis for more effective public and private manpower policies.

Data have been collected in interviews with management personnel and union representatives, where appropriate, in 20 manufacturing firms where employment is expanding. Interviews have focused on the effectiveness over time of the measures to meet labor shortages in production and maintenance jobs.

At eight plants, interviews were also conducted with personnel executives, industrial engineers, equipment designers, and selected lower level management personnel concerning the internal impact of the approaches used in adjusting to changing labor supply conditions. These additional interviews have sought data on the effects of a transition from a loose to a tight labor supply on such variables as total employment, number of job classifications and incumbents, number and descriptions of jobs redesigned, compensation, training, hours of work, and promotion opportunities.

In addition, several Boston metropolitan area employers have been interviewed about their experiences in providing employment opportunities for the hard-core unemployed. This phase of the study focuses on the work performance of the disadvantaged as it relates to the operation of the internal job market.

Status of Project: Completion is scheduled for October 1969.

1.1.16 HARVARD UNIVERSITY
CAMBRIDGE, MASS.

CONTRACT NO. 81–23–67–23

Principal Staff: Dr. James G. Scoville, Department of Economics

Project Title: A Study of the Conceptual Bases and Uses of Various Manpower and Occupational Systems

Objectives and Procedures: This study is examining the principles, purposes, and uses of existing manpower and occupational classification systems (including the *Dictionary of Occupational Titles*). Special attention is being given to: (1) Determining how the ultimate use of job data affects the methods of collection and aggregation; (2) developing and refining concepts used to describe jobs or occupations; and (3) combining the various classification systems into a more flexible framework for dealing with manpower and occupational questions. The researcher is conducting informal interviews with selected users and developers of various forms of occupational information to obtain accounts of data needs, untapped sources of information, and potential for improved data use.

Status of Project: Completion is scheduled for October 1969.

1.1.17 HARVARD UNIVERSITY
CAMBRIDGE, MASS.

CONTRACT NO. 81–23–68–37[3]

Principal Staff: Dr. Richard B. Freeman, Department of Economics

Project Title: A Study of Factors Affecting the Demand for Scientists, Engineers, and Technicians and Methods of Forecasting This Demand

Objectives and Procedures: This study seeks to improve forecasts of the demand for scientists, engineers, and technicians. It is developing and testing a model of the demand for these workers that focuses on the causes of changes in demand and the effects of substitution among different occupations. Input-output analysis is being used to estimate the effects of research and development work on requirements for labor skills, capital, and intermediate goods.

In addition, differences in skill composition between firms with "best practice" technology and those with older technologies are being ascertained from representatives of such firms to permit assessment of whether demand projections based on "best practice" techniques would be superior to those based on the "average" technique in the industry as a whole.

Status of Project: Completion is scheduled for May 1970.

1.1.18 HARVARD UNIVERSITY
CAMBRIDGE, MASS.

CONTRACT NO. 81–23–69–17

Principal Staff: Dr. John T. Dunlop, Department of Economics, and Dr. Daniel Quinn Mills, John F. Kennedy School of Government

Project Title: Manpower Development and Utilization in the Contract Construction Industry

Objectives and Procedures: This comprehensive appraisal of the construction industry's capacity to prepare for projected changes in its manpower requirements and effect racial integration in the construction trades focuses on the need to modernize the industry's training system. Problems to be explored include the relationship between seasonality and the continuity of training programs; the costs and data needed for developing techniques of manpower forecasting and work scheduling to improve the use of manpower; the use of labor-management training funds to improve and stabilize industry training programs; and informal methods of entry into the construction trades for minority workers. Data are being collected through: (1) Informal interviews with representatives of the contract construction industry, building trades unions, Federal agencies, and the academic community; (2) observation and analysis of selected training programs; and (3) analysis of statistics and research studies.

Status of Project: Completion is scheduled for October 1970.

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[3] This study is cosponsored by the National Science Foundation.

1.1.19 UNIVERSITY OF HOUSTON,
HOUSTON, TEX.
in cooperation with
TEXAS SOUTHERN UNIVERSITY
HOUSTON, TEX.

CONTRACT NO. 81-46-68-02

Principal Staff: Dr. J. E. Champagne and Dr. J. Earl Williams, College of Business Administration, University of Houston; Dr. Robert Prater, School of Industries, Texas Southern University

Project Title: Negro Teenage Unemployment in Houston

Objectives and Procedures: This study of Negro and white teenagers in the Houston metropolitan area seeks explanations of the higher unemployment of Negro teenagers as a guide to Federal policy and programs. Data have been obtained from 256 youth aged 16 to 19 who either graduated from or dropped out of high school in Houston in 1966 on their personal characteristics, education and training, work history, jobseeking behavior, attitudes toward work, and aspirations and motivations. From Houston employers, information has been obtained about their attitudes toward and experiences with hiring teenagers, including differences related to race, and their opinions of the youth's qualifications for entry-level jobs.

Status of Project: Completion is scheduled for October 1969.

Highlights of Preliminary Findings: Many Houston employers were found to be unwilling to hire teenagers, especially Negroes, and Negro teenagers, particularly the girls, reported serious employment problems. In fact, a lower proportion of Negro high school graduates than white dropouts were employed, although the white dropouts expected higher wages. The Negro youth were also handicapped by lack of know-how in jobseeking; they received less relevant counseling in school and had fewer personal contacts for help in getting jobs. Two in five Negro teenagers were members of a family with an annual income of $3,000 or less, compared with one in 12 white teenagers.

1.1.20 UNIVERSITY OF ILLINOIS
URBANA, ILL.

CONTRACT NO. 81-15-69-07

Principal Staff: Dr. Walter H. Franke, Institute of Labor and Industrial Relations

Project Title: Development of a Model University Human Resources Program

Objectives and Procedures: This project is planning a model for a human resources program as a guide to the creation of university manpower centers. Primarily through workshops, the study is developing an inventory of the types of services a university human resources program might offer, particularly in development of local, State, and regional manpower programs; experimenting with programs for the dissemination of manpower information and ideas; and developing tentative research areas and designs.

Status of Project: Completion is scheduled for December 1969.

1.1.21 THE UNIVERSITY OF KENTUCKY RESEARCH FOUNDATION
LEXINGTON, KY.

CONTRACT NO. 81-19-68-13

Principal Staff: Dr. F. Ray Marshall, Department of Economics

Project Title: Negro Employment in the South

Objectives and Procedures: This study seeks to identify areas, industries, and occupations where Negro employment opportunities may be improved and to recommend manpower policies and programs to help attain this objective. It examines: (1) The political, social, and economic impediments to improving the employment opportunities of Negroes in 13 Southern States (the 11 Confederate States plus Kentucky and Oklahoma); (2) differences in Negro employment patterns by industry, occupation, and geographic area; and (3) present and future employment prospects for Negroes in the South generally.

Data for seven metropolitan areas are being analyzed for publication in a series of monographs.

Status of Project: Completion is scheduled for September 1970.

1.1.22 THE UNIVERSITY OF KENTUCKY RESEARCH FOUNDATION
LEXINGTON, KY.

CONTRACT NO. 81–19–68–17

Principal Staff: Dr. Niles M. Hansen, Department of Economics

Project Title: Urban and Regional Dimensions of Manpower Policy

Objectives and Procedures: This study examines current regional development programs and alternatives, with specific reference to the need for training, employment, and worker mobility.

Status of Project: A final report is expected by August 1969.

Highlights of Preliminary Findings: Development programs, the researcher found, have emphasized efforts to improve physical facilities in outlying rural areas in the hope of inducing economic activity and growth, without commensurate effort to improve human resources. More recently, funds have been allocated to attract industry to central-city areas, in large metropolitan centers already plagued by many serious problems.

The researcher concludes that the most efficient way to provide jobs for residents of distressed regions would be to develop, as growth centers, intermediate-sized cities that have demonstrated strong economic and employment potential. These growth centers would not only provide employment for residents, but would also help reduce the influx of ill-prepared migrants to large metropolitan centers which have difficulties in absorbing them. Mobility benefiting both the worker and the receiving area is now considerably restricted because many rural workers do not possess the skills or training for urban employment.

The study indicates that an essential feature of manpower policy should be to link the problems of lagging areas to opportunities in growth centers by aiding the further development of such centers on the condition the centers employ a significant number of unemployed or underemployed persons from lagging areas. An accompanying investment in human resources and expansion of manpower programs in lagging areas, including location programs with comprehensive supportive services, are also desirable and economically rational from a national point of view.

1.1.23 MICHIGAN STATE UNIVERSITY
EAST LANSING, MICH.

CONTRACT NO. MDTA 9–63

Principal Staff: Dr. Einar Hardin, Dr. Sigmund Nosow, and Dr. Michael E. Borus, School of Labor and Industrial Relations

Project Title: Measuring the Benefits and Costs of Retraining Programs for Unemployed Workers

Objectives and Procedures: This project consists of two separate studies of retraining under the Manpower Development and Training Act or the Area Redevelopment Act. One concerns the attributes and attitudes of trainees that are associated with successful retraining; the other, the economic costs and benefits of retraining. Both are based on samples of trainees who entered institutional training courses in Michigan —between late 1963 and early 1965 for the first study and between 1962 and 1964 for the second study—and cover dropouts as well as those who completed training. Interviews were conducted with the selected trainees and with control groups of nontrainees of similar background, and other information was obtained from training project records, educational institutions, and Government agencies. The first study examined the characteristics and labor market outcomes for MDTA trainees and the outcomes that are not available for the control group members. The second study examined the effects of training on the gross national product, the disposable incomes of trainees, and the expenditures and receipts of government.

Status of Project: A report on the first study, *Retraining Under the Manpower Development and Training Act: A Study of Attributes of Trainees Associated with Successful Retraining,* has been completed (see **3.1.59**). The second study, "Economic Benefits and Costs of Retraining Courses in Michigan," is scheduled for completion in December 1969.

Highlights of Preliminary Findings: The first study, which covered trainees in seven occupations in four metropolitan areas, suggested that the pull of the labor market affects training retention rates. When the labor market tightened, those least likely to obtain employment (i.e., nonwhites, women, and youth) remained to complete training. Occupational and educational experience and marital status did not seem to affect completion, but completion rates differed among courses and communities. The community which had no nonwhite and no female trainees had the highest proportion of dropouts.

Three-fourths of the trainees who were interviewed 3 months after the training courses ended had completed their courses, and about 70 percent of those were in training-related work. Dropouts were 1½ times as likely to be unemployed and 2½ times as likely to be out of the labor force. The community with the highest trainee retention rate had the lowest proportion in training-related work and the highest rates of unemployment and exit from the labor force.

Among women, only 13 percent of those who completed their training had no job, compared with almost half of the dropouts. Among male dropouts, whites were more mobile (i.e., had held more jobs since participating in the training course) than nonwhites, but the reverse was true for men completing courses.

Unemployment rates did not differ significantly between trainees and the control group, but trainees far exceeded the control group in semiprofessional and skilled occupations. Nearly half the trainees but only 30 percent of the control group felt "very much" job satisfaction.

In the second study, institutional retraining courses were judged to be sound investments for the economy and the individual trainees. The benefit-cost ratio was estimated to be 1.21 for society, assuming the benefits of the first year after training continued for 10 years and using a discount rate of 10 percent. Short courses, those of 60 to 200 hours, had a considerably higher than average cost ratio—17.34. Similarly, there were significant benefits for trainees, particularly those in short courses, who were estimated to receive nearly $7,500 in added income over a 10-year period as a result of training. The government also received much greater gains from short training courses than from longer ones, taking into account annual savings in welfare payments and unemployment insurance benefits, as well as increased tax receipts.

The social and individual benefit-cost ratios for short courses were above average among women, nonwhites, enrollees who had low earnings in the year before training, and enrollees who had not received unemployment insurance benefits in that year. Short training courses for health care and miscellaneous sales and service occupations also yielded above-average benefit-cost ratios.

1.1.24 MICHIGAN STATE UNIVERSITY
EAST LANSING, MICH.

CONTRACT NO. 81–24–66–32

Principal Staff: Dr. Harvey M. Choldin and Grafton Trout, Rural Manpower Center

Project Title: The Mexican American Migrant Farmworker in Transition

Objectives and Procedures: This study describes the process by which increasing numbers of Mexican American migrant farmworkers drop out of the migrant stream, settle in northern communities, and adjust to new labor force requirements and opportunities. It also identifies factors affecting the settlement and stablization of migrant workers in selected communities, with attention to occupation and income, to provide policy guidelines for facilitating the transition process.

Interviews were held with 695 migrant heads of households and nearly 50 community leaders in eight Michigan counties outside the Detroit metropolitan area. Information was collected about the migrant's occupational background, motivation for dropping out of the migrant stream, kinship and friendship ties, job aspirations, interests in training and retraining, and community reactions.

Status of Project: Key items in the responses have been analyzed in an interim paper, and completion of the study is scheduled for November 1969.

Highlights of Preliminary Findings: Most of the Mexican American migrants were found to have settled in Michigan since 1950. The migration and settlement process is proceeding with the aid of kinship ties; namely, with one person or couple who has settled in Michigan helping their relatives move to the same community to join them.

Jobs were the main reason the migrants left their former homes, although they did not have specific information about the kinds of jobs available in Michigan or the type of occupation they desired. Some spent their first full year in Michigan in communities near an area where they did farmwork in the summer and continued into food processing in the winter. The great majority soon moved into middle-sized cities with industrial employment opportunities.

Most of the migrants got jobs by going directly to the employers, or through friends and relatives. Few used public and private employment agencies. The majority were working as operatives and were concentrated in the metal fabrication (mainly foundries) and motor vehicle industries.

A substantial number of the migrants had taken specialized job training, apprenticeship training, adult education classes, or had attended military service schools. Most of the training lasted 6 months or more and was received in Michigan.

One-third of the wives of the migrants in the study were employed and three-fifths of those who were not working had been employed at some time in the past.

The great majority of the migrant families were buying homes, and nearly one-fourth of them owned their houses outright. Typically, the migrants lived in relatively heterogeneous neighborhoods; only one in 10 reported that their neighborhood was mostly Mexican American.

The majority of the heads of migrant households were bilingual. Almost all spoke at least some English, and more adults were able to write English than Spanish.

Most Mexican Americans perceived themselves as occupying a lower middle socioeconomic position in their respective Michigan communities, considerably lower than the average Anglo, but higher than the Negro. Compare to themselves, most of the adults felt that their children had better opportunities for integration and assimilation. Thus they preferred that their children learn English in school, attend college, and seek professional careers.

1.1.25 MICHIGAN STATE UNIVERSITY
EAST LANSING, MICH.

CONTRACT NO. 81-24-68-42

Principal Staff: Dr. R. F. Cargill and Dr. G. E. Rossmiller, Department of Economics

Project Title: The Manpower Implications of Mechanization for Fruit and Vegetable Harvesting

Objectives and Procedures: This study analyzes the potential effects of mechanization on manpower and wages in fruit and vegetable harvesting. The researchers met with experts on technology at a seminar held in December 1968. Manpower implications of the data presented at this meeting are to be examined at two subsequent conferences.

Status of Project: The first in a series of three publications has been completed (see **3.1.60**). Project completion is scheduled for November 1969.

1.1.26 MICHIGAN STATE UNIVERSITY
EAST LANSING, MICH.

CONTRACT NO. 81-24-68-45

Principal Staff: Dr. Daniel H. Kruger, School of Labor and Industrial Relations

Project Title: Occupational Licensing in Selected States and Municipalities: Its Implications for Manpower Policy

Objectives and Procedures: This study explores the feasibility of developing statistics on: (1) The extent to which licensing affects the supply of manpower in nonprofessional occupations; and (2) the structure and operations of State, county, and municipal licensing authorities. Information is being gathered from licensing boards and officials in Georgia, Michigan, and Ohio on licensing procedures and requirements, as well as on the numbers of applicants, new licensees, renewals, practicing licensees, and persons who fail licensing examinations.

This research, an outgrowth of a pilot study (see **3.3.09**), complements another current project (see

1.1.11). Together the two studies are designed to yield information that can be used to make it easier for disadvantaged workers to enter licensed occupations while safeguarding legitimate public interests.

Status of Project: Completion is scheduled for December 1969.

1.1.27 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

CONTRACT NO. MDTA 17–63 [4]

Principal Staff: Dr. J. R. P. French, Jr., Dr. Gerald Gurin, and Dr. David Bradford, Survey Research Center

Project Title: Attitude Survey of Manpower Development and Training Act Trainees

Objectives and Procedures: This nationwide study of attitudes and motivation surveyed 2,000 MDTA trainees through personal interviews and 4,000 through questionnaires. Information was sought at enrollment, on completion (or dropping out) of the program, and 6 months after completion. Data were obtained on trainees' attitudes toward the MDTA program, satisfaction with teaching methods, perceptions of the relevance of instruction to subsequent work experience and job performance, reactions to past unemployment, and comparative ratings of their pretraining and posttraining skill levels. In addition, supervisors of about 1,000 of the trainees were asked to rate the trainees' performance in posttraining jobs.

Status of Project: Completion is scheduled for December 1969.

Highlights of Preliminary Findings: The study showed that the principal distinction between trainees who dropped out of the program to take jobs and those who completed training was that the former felt greater economic pressure at the time of enrollment. In fact, their economic situation was more precarious: they were less certain that the training allowances would be adequate and felt that they would have to work to supplement payments; they were often married and had very young children; and they had less savings and more debts.

Even though they had dropped out of the training program, they were earning more at the time of the posttraining study than those who had completed the program. The researchers suggested that greater efforts were needed to find more desirable jobs for those who completed training.

Most trainees were satisfied with their training. Their principal complaints were that the training courses offered too little opportunity to practice their newly acquired skills, in some cases owing to the lack of sufficient equipment.

Training officials have been briefed on these findings, so that they can use them to make training programs more effective.

1.1.28 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

CONTRACT NO. 81–24–68–26

Principal Staff: Dr. Charles F. Cannell and Dr. Kent Marquis, Survey Research Center

Project Title: A Study of Interviewer-Respondent Interaction in the Urban Employment Survey

Objectives and Procedures: In this study, middle-class white women interviewed white and Negro male workers in selected age groups regarding their employment problems and tape recordings were made of the interviews. The purpose of the study was to develop basic knowledge about the kinds and amount of behavior that takes place in a household interview. The tape recordings were carefully coded with regard to interaction and used to develop a system for evaluating questions, interviewer instructions, and training effectiveness in interview situations.

Status of Project: Completion is scheduled for September 1969.

Highlights of Preliminary Findings: The most significant finding was that a very substantial amount of the verbal exchanges during interviews was based on actions not covered by interview procedures and instructions. Hence, it seems that the results of surveys may be distorted because the interviewer or respondent directed parts of the interview along lines not intended by the researcher.

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[4] This project is jointly sponsored by the Manpower Administration, U.S. Department of Labor, and the Office of Education, U.S. Department of Health, Education, and Welfare.

Another significant finding was that older respondents had a higher level of unanticipated interaction with interviewers than did younger respondents.

1.1.29 THE UNIVERSITY OF MICHIGAN ANN ARBOR, MICH.

CONTRACT NO. 81-24-68-33 [5]

Principal Staff: Dr. Robert L. Kahn and Dr. J. C. Bachman, Survey Research Center

Project Title: A Study of Youth in High School, at Work, and Unemployed

Objectives and Procedures: This project investigates three basic questions: (1) To what extent do differences in the behavior of boys in school, at work, and unemployed reflect established differences in background, attitudes and motives, and/or different environments? (2) Do differences in school environment have an observable effect on the education and social adjustment of adolescent boys? (3) Why do boys leave school before graduation, and what happens to them when they enter the labor market?

Data are being collected through followup studies on boys who were in the 10th grade in 1966 in about 100 schools that make up: (1) A probability sample of the Nation's schools; (2) a small discretionary sample of schools with special characteristics (e.g., vocational schools or schools with Elementary-Secondary Education Act title I funds). An initial sample of over 2,500 boys was interviewed in the fall of 1966; over 2,200 of them were reinterviewed in the spring of 1968; and further followup interviews cover spring 1969 and spring 1970. Interviews have also been conducted with school staff—principals, counselors, and teachers—to provide insight into school organization and environment.

Status of Project: A working paper summarizing data from student interviews through 1969 is scheduled for completion by October 1969. For a comprehensive description of the design, purpose, and survey instruments of the study, see J. C. Bachman, et al. *Youth in Transition: Volume I—Blueprint for a Longitudinal Study of Adolescent Boys,* Survey Research Center, Institute for Social Research, The University of Michigan, Ann Arbor, Mich., 1967. Intermediate working papers are available from the Survey Research Center.

Highlights of Preliminary Findings: In the 1968 interviews, over 200 boys reported having dropped out of school, at least for a time, but about half had returned. The most frequent reason given for dropping out, whether temporarily or permanently, was some aspect of the school environment, school personnel, or both.

1.1.30 THE UNIVERSITY OF MICHIGAN ANN ARBOR, MICH.

CONTRACT NO. 81-09-69-23 [6]

Principal Staff: Dr. Sidney Cobb and Dr. Willard Rodgers, Survey Research Center

Project Title: Effects of Military Service on Young Men From Depressed Urban Areas

Objectives and Procedures: This study attempts to find out why some young men from depressed areas of a large city enlist in the Armed Forces and how service affects their subsequent adjustment to work. Questionnaires are being administered to a sample of such young men who have been in service and a matched sample who have not served to detect differences in attitudes toward jobs and the community; job performance, including the use of skills acquired in service; and adjustment to work, including the use and effects of various veterans' benefits. Sources and criteria for sample selection and details of questionnaires are being worked out in cooperation with the Department of Defense, the Veterans Administration, and the Department of Labor.

Status of Project: Completion is scheduled for January 1971.

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[5] The U.S. Department of Labor is jointly sponsoring this study, conducted under a University of Michigan contract, with the Office of Education, U.S. Department of Health, Education, and Welfare.

[6] This project is jointly funded with the Department of Defense and the Veterans Administration.

1.1.31 ROBERT R. NATHAN ASSOCIATES
WASHINGTON, D.C.

CONTRACT NO. 81-09-68-01 [7]

Principal Staff: Edward D. Hollander

Project Title: Study of the Transferability of Military Trained Medical Personnel to the Civilian Sector

Objectives and Procedures: This study investigates how military personnel with paramedical training can be persuaded to use it in civilian jobs, in order to recommend appropriate policies and programs. Newly separated military personnel are being asked how much they know about jobs and skill requirements in civilian medical occupations, why they think paramedical careers are attractive or unattractive, and whether they need additional training to meet civilian job requirements. Hospitals and other employers of such workers are also being canvassed.

Status of Project: Completion is scheduled for December 1969.

1.1.32 NATIONAL MANPOWER POLICY TASK FORCE
WASHINGTON, D.C.

CONTRACT NO. 81-09-66-31

Principal Staff: Dr. Charles A. Myers and Dr. Sar A. Levitan

Project Title: Identifying Needs and Priorities in Manpower Research

Objectives and Procedures: Working closely with government and the research community, the Task Force reviews current manpower information and assesses it in relation to the need for new and changing manpower policies, programs, and research. Special papers and reports are being prepared on priority policy issues.

Status of Project: Reports are published as they become available (see **3.1.77, 3.1.78,** and **3.1.79**). Two of the three reports thus far completed were submitted during fiscal year 1969: *The Youth Labor Market* reviewed and evaluated the existing literature on the employment, unemployment, and labor force participation of teenagers and other young workers and identified areas where additional research is needed and feasible. *Apprenticeship Problems and Policies* offered some evaluation of the role of apprenticeship today.

1.1.33 NATIONAL PLANNING ASSOCIATION
WASHINGTON, D.C.

CONTRACT NO. 81-09-68-36

Principal Staff: Dr. Leonard A. Lecht

Project Title: Research on the Universe of Need and on Manpower Requirements for National Programs

Objectives and Procedures: This study consists of three major elements:

1. Developing national estimates of the "universe of need" through 1974; i.e., the numbers of persons who could benefit from Federal manpower programs and other supportive services (for example, the long-term unemployed, low-wage workers, part-time workers, the disabled, and those not in the labor force because they believe that jobs are not to be found). The estimates are being classified by such characteristics as age, sex, level of education, and present or last occupation.

2. Identifying and analyzing, in relation to the categories above, the manpower implications of current and proposed legislation and various national programs.

3. Estimating the number of jobs for nonwhites that would result per billion dollars of expenditures on various national priority programs, building on the NPA's recently completed study, *Manpower Requirements for National Objectives in the 1970's* (see **3.1.84**).

Status of Project: Completion is scheduled for November 1969.

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[7] This project is also supported by the Office of Education, U.S. Department of Health, Education, and Welfare.

1.1.34 NEW YORK UNIVERSITY

NEW YORK, N.Y.

CONTRACT NO. 81–34–66–25

Principal Staff: Dr. Daniel E. Diamond, School of Commerce

Project Title: The Relationship of Industry Hiring Practices to the Employment of Disadvantaged Groups

Objectives and Procedures: This study compares formal and informal hiring standards with actual requirements for job performance in about 10 occupations and investigates the characteristics and employability of jobseekers from disadvantaged groups in light of these requirements. Information is being obtained from employers and disadvantaged workers in New York and St. Louis.

Status of Project: Completion is scheduled for October 1969.

1.1.35 NEW YORK UNIVERSITY

NEW YORK, N.Y.

CONTRACT NO. 81–34–69–02

Principal Staff: Dr. Ronald D. Corwin, Department of Sociology

Project Title: Black Workers in White Industries: The Banking Industry

Objectives and Procedures: This research is exploring ways of opening up to Negroes more white-collar jobs in banking. In case studies of six New York City banks, interviews are being conducted with key executive, supervisory, and administrative personnel, as well as with new trainees and employees, to gather information on: (1) The processes which result in successful recruitment, hiring, training, and promotion of minority group employees for white-collar jobs in banking; and (2) variations in the occupational distribution of Negro workers between the banks.

Status of Project: Completion is scheduled for January 1970.

1.1.36 NEW YORK UNIVERSITY

NEW YORK, N.Y.

CONTRACT NO. 81–34–69–16

Principal Staff: Dr. David Rogers, Graduate School of Business Administration

Project Title: Interorganizational Relations and Inner-City Manpower Programs

Objectives and Procedures: This pilot study is developing a set of propositions about the effects of particular organizational forms and interorganizational relations on the delivery systems of inner-city manpower programs for the disadvantaged. The objective is to develop a conceptual scheme and to recommend organizational techniques and arrangements that will improve efficiency and effectiveness. The recommendations are to be based on: (1) A review of the effects of Federal agency rules and practices; (2) an analysis of the social structure of inner cities; (3) surveys of manpower programs in New York City, Philadelphia, and Cleveland and data on those programs; and (4) the results of an earlier study (see **1.1.10**) in which the researcher participated.

Status of Project: Completion is scheduled for January 1970.

1.1.37 NEWARK COLLEGE OF ENGINEERING

NEWARK, N.J.

CONTRACT NO. 81–32–69–14

Principal Staff: Dr. Robert Kiehl, Foundation for the Advancement of Graduate Study in Engineering

Project Title: Opportunities for Blacks in the Profession of Engineering

Objectives and Procedures: This study, building on two previous surveys by the researcher, seeks data on educational and employment opportunities for Negroes in engineering, as a basis for policies concerning student support and career guidance for Negro youth. Eight hundred professional engineering schools and technical institutes are being surveyed for information on their Negro enrollment. One-fourth of the 1968 Negro graduates of these schools are being sent questionnaires about the type of training received, areas of specialization, number of job offers on graduation, current job duties and salary, relation of the job to education or training, and possibilities for advancement.

Status of Project: Completion is scheduled for July 1970.

1.1.38 NORTH CAROLINA STATE UNIVERSITY, RALEIGH
RALEIGH, N.C., in cooperation with
NORTH CAROLINA AGRICULTURAL AND TECHNICAL COLLEGE, GREENSBORO
GREENSBORO, N.C.

CONTRACT NO. 81-35-67-27

Principal Staff: Dr. Charles H. Rogers, Department of Education, North Carolina State University, and Benjamin Harris, Department of Agricultural Economics, North Carolina Agricultural and Technical College

Project Title: Generic Bases of Negro Teenage Unemployment: A Preliminary Investigation

Objectives and Procedures: This study seeks reasons for the excessively high rate of unemployment among Negro teenage youth in rural communities, to suggest remedial programs and possible further research. In interviews with a sample of 345 teenagers who graduated from or dropped out of high school in 1966 in two adjacent North Carolina counties, information was obtained on their jobseeking techniques, knowledge of the job market, employment experience, aspirations, and self-image, as well as on their family background, education, and training. A sample of employers and school officials was also interviewed in order to evaluate job opportunities, community attitudes, and adequacy of area educational and training facilities open to Negroes.

Status of Project: Completion is scheduled for July 1969.

Highlights of Preliminary Findings: Although the young Negro men in the study did not have a much higher unemployment rate than their white counterparts, a higher proportion of them were in very low-wage, dead end, menial jobs. One-eighth of white men, but none of the Negroes, were in craft occupations. The young Negro men had gone further in school and some had taken additional training in Government programs. The young white men had taken more vocational courses in high school and were far more likely to have had additional training in technical institutes, business colleges, apprenticeship programs, and full-time company training programs.

Two-fifths of the young Negro women were unemployed, and one-fifth of those who had jobs worked in household and other service occupations.

The researchers found that employment differentials could not be attributed to lack of motivation by the Negro youth, who scored higher than white youth on the measures of motivation. Possible explanations suggested by the study are schooling of inferior quality, discrimination, and less knowledge of job openings.

1.1.39 NORTHEASTERN UNIVERSITY
BOSTON, MASS.

CONTRACT NO. 81-20-34

Principal Staff: Dr. Morris A. Horowitz and Dr. Irwin L. Herrnstadt, Department of Economics

Project Title: Evaluation of the Training of Tool and Die Makers

Objectives and Procedures: To study the development of a skilled tradesman and evaluate the effectiveness of alternative paths to a trade, this project examines the case of tool and die makers—a small group of workers crucial to the economy. The researchers interviewed more than 400 tool and die makers and more than 60 foremen, as well as other management personnel in more than 70 establishments, and educators and public officials in Massachusetts.

Status of Project: Completion is expected in August 1969.

Highlights of Preliminary Findings: Probably the most startling finding is that none of the six different paths into this occupation that were identified was either predominant or clearly superior. (Less than one-fourth of the journeymen had been apprentices.)

Only one path, vocational high school combined with apprenticeship, scored well on most measures of effectiveness, but no path was consistently poor. These measures were duration of training, foreman's ratings, the time needed to be classified as a toolmaker or diemaker, and the time needed to achieve all-around competence.

The paths with shortest training time were vocational high school (an average of 2.7 years), on-the-job training (2.9 years), and apprenticeship (3.4 years). Vocational school plus apprenticeship took 5.5 years; vocational school plus on-the-job training, 4.6 years. By far the longest was "picked up the trade" (7.3 years).

The shortest path to all-around competence was vocational high school coupled with apprenticeship. Men who took this path estimated that they needed a median of 6½ years of training and work experience after formal schooling to become competent in all phases of toolmaking and 8 years in diemaking. Apprenticeship by itself was nearly as short for toolmakers but not for diemakers. Vocational high school by itself and picking up the trade both took from 10 to 12 years to produce a proficient toolmaker or diemaker.

There was little consistency between the times required for gaining competence and for being classified as a toolmaker or diemaker, although vocational education combined with apprenticeship remained the shortest path.

Foremen gave better than average ratings (based on speed, accuracy, and breadth of skill) to somewhat higher proportions of men who entered the trade through vocational high school, either alone or combined with apprenticeship, but the differences between paths were not significant. Nor were the differences in performance significantly affected by length of training, amount of education, or amount of experience in a tool and die job shop. For example, one-fourth of the men had become above-average workers even though they had not finished high school, and at least 40 percent of the men from each training path, regardless of length, earned above-average ratings, as did a high proportion of men who did not complete their training. Only age and years spent in the trade were significantly related to differences in performance: until men passed their middle forties, more of those with long experience got above-average ratings. Even in combination, however, all of these factors explained very little of the variation in performance ratings.

Hence, the researchers concluded that an inherent talent for and an interest in tool and die making was crucial to success—a finding supported by persons in the trade. Careful screening for aptitude, in preference to rigid entry requirements, was therefore recommended. More effective guidance programs were seen as essential if students with trade inclinations are not to be channeled into a college education and white-collar employment. Flexibility in both the length and variety of training was also recommended, so that potential craftsmen of varying age, experience, and education may have an opportunity to enter the trade. They also opted for diversification within a given path, because not all employers need all-around craftsmen.

1.1.40 THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION
COLUMBUS, OHIO and

BUREAU OF THE CENSUS
U.S. DEPARTMENT OF COMMERCE
WASHINGTON, D.C.

CONTRACT NO. 81–37–69–15[8]

Principal Staff: Dr. Herbert S. Parnes, Center for Human Resources Research, Ohio State University; and Demographic Surveys Division, Bureau of the Census

Project Title: Longitudinal Study of Labor Force Behavior

Objectives and Procedures: This 5-year study, which began in 1966, will identify and explore changes in the relationship among factors influencing the work behavior and experience of individuals in the following groups: Young men and women, age 14 to 24; men, age 45 to 59; and women, age 30 to 44. Whereas available data single out some important correlates of the job difficulties of these groups (e.g., inadequate education), the present study focuses on the interaction among economic, sociological, and psychological variables that permits some members of a given age-education-occupation group to have satisfactory work experi-

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[8] Formerly 81–37–68–21.

ences while others do not. The completed study will constitute a comprehensive body of data on labor mobility for the above segments of the labor force.

This study contemplates six consecutive surveys of each population group in 1-year intervals. The Bureau of the Census drew the samples, and is conducting the interviews and tabulating the data. Ohio State prepares the interview schedules, plans the tabulations, analyzes the results, prepares reports on the annual surveys, and will write a final comprehensive report for each group.

Status of Project:

1. Eleven national annual surveys have been conducted by the Bureau of the Census: three of men, age 45 to 59 (one by mail); three of women, age 30 to 44 (one by mail); three of young men, age 14 to 24; and two of young women, age 14 to 24.

2. Two monographs have been prepared by Ohio State University (see **3.1.94** and **3.1.95**): the initial 1966 survey of men, age 45 to 59, *The Pre-Retirement Years;* and the initial 1966 survey of young men, age 14 to 24, *Career Thresholds.*

Highlights of Preliminary Findings:

1. The initial survey of men, age 45 to 59, revealed the following relationships: (*a*) Almost half of the men had received some vocation training outside the regular school system, and one-fifth had received more than one type; (*b*) the number of different kinds of training a man had taken was positively related to his hourly rate of pay; (*c*) most of the men who were not in the labor force gave poor health as the reason, as did many of the unemployed; (*d*) there was scarcely any measure of labor market behavior that did not record a less favorable position for Negro than for white men. Although the contrasts were less marked within major occupational groups, the disparity in occupational status between Negro and white men was greater at the time of the survey than when these men began their work careers; and (*e*) considerable movement among employers, occupations, and geographic areas occurred between the time the men began work and the time they reached their forties and fifties. About 9 out of 10 were at work for a different employer than the one who first hired them, between 7 and 8 out of 10 were in a different occupation, and half were working in a different community.

2. The initial survey of young men, age 14 to 24, included these findings: (*a*) Students accounted for a majority of the reported unemployment, but they applied to public or private employment agencies for help in finding a job even less frequently than nonstudents; (*b*) as students advanced through high school, their educational expectations fell and the gap between their expectations and their aspirations narrowed, possibly reflecting a more realistic view of their capabilities and financial resources, but the proportion of 16- and 17-year-old Negroes who "expected" to attend college was double the college enrollment rate among 18- and 19-year-old Negroes; (*c*) nearly half of both Negro and white high school students aspired to white-collar jobs, which account for only one-eighth of employed men, probably indicative of the young men's great ignorance of occupational requirements and prospects; (*d*) Negro youth knew much less about the world of work than did their white counterparts; (*e*) health problems were far more significant in the unemployment of Negro than white youth not only because of the greater incidence of such problems but also because physical fitness was more often a necessary condition to employment for Negroes; (*f*) Negro youth with job training had unemployment rates one-third those of Negro youngsters without training; (*g*) availability of public transportation and distance between home and job tend to restrict the employment horizons of unemployed Negro youth much more severely than white youth; (*h*) failure to graduate from high school is a greater handicap in terms of pay for Negro youth than for white youth; and (*i*) only a third of the Negro youth said they liked their jobs compared with a half of the white youth. This disparity was observed in all major occupational categories.

1.1.41 OKLAHOMA STATE UNIVERSITY OF AGRICULTURE AND APPLIED SCIENCE, RESEARCH FOUNDATION

STILLWATER, OKLA.

CONTRACT NO. 81-38-69-10

Principal Staff: Dr. Paul V. Braden, School of Occupational and Adult Education

Project Title: The Design and Implementation of a State Occupational Training Information System (OTIS) Based on the Needs of Oklahoma

Objectives and Procedures: This project is constructing a prototype information system which would enable a State's vocational and technical schools to plan curriculums and enrollments that will provide the State's employers with enough qualified graduates to fill job vacancies and staff expanding operations and new plants. The research will reexamine, update, and enlarge data on occupational demand and supply in Oklahoma which were compiled and converted to categories relevant for planning vocational education in an earlier project financed partly by the Manpower Administration's Institutional Grant Program (see **1.2.06**). The initial benchmark data will be limited to occupations within the scope of vocational education. The researchers will also collect data from graduates of State vocational schools on their employment history and the relevance of their courses to their work. The information developed will be disseminated to school districts, and the researchers will set up an advisory committee to help devise a system for the periodic review and adjustment of vocational education programs in the light of current and prospective labor market conditions.

Status of Project: Completion is scheduled for January 1970.

1.1.42 OKLAHOMA STATE UNIVERSITY OF AGRICULTURE AND APPLIED SCIENCE, RESEARCH FOUNDATION

STILLWATER, OKLA.

CONTRACT NO. 81-38-69-19

Principal Staff: Dr. David W. Stevens, Department of Economics

Project Title: The Effects of Supplemental Labor Market Information in Encouraging Self-Initiated Job Finding

Objectives and Procedures: An outgrowth of another Manpower Administration contract (see **1.2.06**), this study is exploring whether registrants at public employment offices who are provided with supplemental labor market information will more often find jobs on their own and what personal characteristics are associated with success in using the information. The study is also working out detailed procedures to adapt successful experimental methods for use in normal operations throughout the public employment service.

Each registrant in an experimental group is being given a special package of services and information; for example, a job search plan, counseling on jobseeking techniques and job-finding strategy, and information on possible job openings related to his work experience and interests. Members of both the experimental group and a control group of registrants receiving only standard services are being interviewed to obtain the following data: Use of information by recipients and any others; number of employer contacts made; duration of unemployment after registration; sources of other information used; source of information leading to employment; earnings in the job secured; and stability of postregistration employment. Information on receptivity to the approach is also being obtained from participants, employment service personnel, and selected employers.

Status of Project: Completion is scheduled for January 1971.

1.1.43 THE PENNSYLVANIA STATE UNIVERSITY

UNIVERSITY PARK, PA.

CONTRACT NO. 81-40-68-12

Principal Staff: Dr. James S. Holt, Department of Agricultural Economics and Rural Sociology

Project Title: The Agricultural Labor Force and Labor Market in the Northeastern States

Objectives and Procedures: This study is assessing the adequacy of the farm labor force in 12 Northeastern States (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and West Virginia) to meet current and expected farm employment needs.

The analysis takes into account data on the farm labor force, patterns of labor use, ongoing and expected technological changes, the demographic characteristics of current and potential farmworkers, and the institutional framework for matching workers and jobs. Where data permit, separate analyses of labor supply and demand are being made for major agricultural commodities, different types of workers, and major job market areas.

Status of Project: Completion is scheduled for October 1969.

1.1.44 THE PENNSYLVANIA STATE UNIVERSITY

UNIVERSITY PARK, PA.

CONTRACT NO. 81-40-69-06

Principal Staff: Dr. Jacob J. Kaufman and Dr. Louis Levine, Institute for Research on Human Resources

Project Title: Manpower Research University Workshops

Objectives and Procedures: In this project, two manpower research-oriented conferences, at Cornell University and at Arizona State University, were conducted in the spring of 1969 to interest social scientists who had recently been awarded their doctoral degrees in specializing in the manpower field and engaging in relevant research. The conference workshops provided opportunity for the interchange of ideas on research presently needed in the human resources and manpower field.

In cooperation with the Manpower Administration, the contractor is assessing the impact and effectiveness of these and three earlier conferences (see **2.1.19** and **3.1.97**) in order to determine the desirability of continuing the seminar series. Questionnaires are being sent to all participants in the five conferences.

Status of Project: The proceedings of the two 1969 conferences and the results of the questionnaire survey are to be submitted in December 1969.

1.1.45 UNIVERSITY OF PENNSYLVANIA

PHILADELPHIA, PA.

CONTRACT NO. 81-40-69-13

Principal Staff: Ann R. Miller, Population Studies Center

Project Title: The Relationship Between Occupational Classification Systems of the Bureau of Employment Security and the Bureau of the Census and Development of a Standard Occupational Classification

Objectives and Procedures: This study is an important component of the work to improve the occupational classification systems used by the Federal Government and to develop a standard occupational classification system. Its purpose is the analysis of data recently developed by the Census Bureau for the Interagency Occupational Classification Committee (see **2.1.03**). These data make possible the comparison of many social and economic characteristics of persons classified by the two major occupational classification systems in use today—that of the Census Bureau and the USTES system as reflected in the *Dictionary of Occupational Titles*. Findings of this study will help to develop measures of convertibility between the two systems and facilitate development of a standard occupational classification system.

Status of Project: Completion is expected in May 1970.

1.1.46 PLANNING RESEARCH CORPORATION

WASHINGTON, D.C.

CONTRACT NO. 81-05-68-06

Principal Staff: Dr. Norman H. Jones and Dr. Allan H. Muir

Project Title: Cost-Benefit Program Supportive Services

Objectives and Procedures: This study seeks to develop improved methods and data for measuring the costs and effectiveness of manpower programs. Attempts are being made to: (1) Analyze the data developed in the contractor's previous study of on-the-job and institutional training programs; (2) develop a method and sampling technique for using social security data on employment and earnings to measure the benefits of training; (3) explore the possibilities of obtaining from local employment service offices better data for cost-benefit and other managerial purposes and develop a model evaluation system with a built-in information system for these offices; (4) devise a technique whereby the Manpower Administration can determine the optimum investment in a particular individual, given his age, education, skills, attitudes, etc.; (5) formulate a consistent structure of goals and subgoals for programs oriented toward the disadvantaged, devise a cost-goal study to explore the best mix of manpower services for the disadvantaged, and calculate the cost-goal curve, insofar as data permit; (6) explore the possibilities of obtaining data from the Unemployment Insurance Service and other government agencies to support more penetrating cost-constraint analysis of unemployment insurance; and (7) investigate the data required for and the relative usefulness and desirability of different approaches to cost-effectiveness analysis of manpower programs; for example, the use of sample versus universal data, one-time versus continuous studies, and cross-sectional versus longitudinal studies.

Status of Project: Completion is scheduled for December 1969.

1.1.47 PURDUE RESEARCH FOUNDATION
LAFAYETTE, IND.

CONTRACT NO. 81-13-33

Principal Staff: Dr. Alfred S. Drew, Department of Industrial Education

Project Title: The Need for Educational and Training Adjustments in the Apprenticeship Programs for Selected Craft Occupations

Objectives and Procedures: A research staff from the Purdue School of Technology is analyzing the administration, content, and effectiveness of apprenticeship in selected trades. Information has been obtained from apprentices, their instructors, journeymen craftsmen, teacher-educators, and labor and management representatives.

Status of Project: Completion is scheduled for November 1969.

Highlights of Preliminary Findings: In all the trades studied, obsolescence of knowledge was recognized as ranging from a moderate to serious problem; for example, by 6 of every 10 journeymen machinists. Fewer than 3 in 10 journeymen machinists had participated in some type of organized education or training in the past 2 years.

The final report, after summarizing the characteristics of journeymen and apprentices in the trades studied and their attitudes toward training and examining how new technology is introduced into these trades, will make recommendations for improving apprentice and journeyman training.

1.1.48 SYSTEM DEVELOPMENT CORP.
SANTA MONICA, CALIF.

CONTRACT NO. 81-05-68-28 [9]

Principal Staff: Dr. Marvin Adelson, Dr. Joseph Fink, and Dr. Harvey M. Adelman

Project Title: Application of Systems Analysis to Manpower Adjustment

Objectives and Procedures: This study explored whether systems analysis techniques can improve current methods of dealing with manpower problems and what aspects of the systems approach can be used in developing manpower policy. It developed a working model, based on systems analysis concepts, for dealing with problems of manpower adjustment, based on historical data and information obtained in interviews with representatives of government, industrial, and academic organizations who are concerned with manpower problems.

Status of Project: A summary report is due in November 1969.

Highlights of Preliminary Findings: The study identifies the problems in a manpower system and defines the mechanisms and institutions involved. It also identifies factors affecting job market operations, particularly the matching of men and jobs. Job transition points in an individual's work career are emphasized in the analysis of factors that affect the five manpower adjustment subsystems that were identified: (1) The individual decision system; (2) the education/training decision system; (3) the employer decision system; (4) the school/job market facilitation system; and (5) the maintenance/innovation decision system.

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[9] This project was also supported by the Office of Education of the U.S. Department of Health, Education, and Welfare, the National Science Foundation, and the National Bureau of Standards of the U.S. Department of Commerce.

1.1.49 TEMPLE UNIVERSITY
PHILADELPHIA, PA.

CONTRACT NO. 81-40-69-20

Principal Staff: Dr. Kenneth McLennan and Dr. Paul Seidenstat, Department of Economics

Project Title: Employment Implications of Firms Entering and Leaving An Urban Labor Market

Objectives and Procedures: This project investigates the effects of business movement into, out of, and within the city limits on employment in selected geographic sectors of a major city, Philadelphia. The study traces the employment effects—particularly on access to job opportunities by inner-city residents—by occupation, type, and characteristics of industry in low-income and high-income sectors. The occupation structures and the occupational and skill characteristics of employees are being compared for entering and leaving firms. The study also analyzes the effects of plant relocation on overall employment and unemployment trends in Philadelphia, on sources of workers and commutation patterns, and on the occupational structure of employment within the city.

Data are being obtained from firms which, during 1967: (1) Entered or left the central city, (2) changed location within the central city, and (3) entered or left a suburban county within the Philadelphia area.

Status of Project: Completion is scheduled for February 1970.

1.1.50 TEXAS A. & M. UNIVERSITY
COLLEGE STATION, TEX.

CONTRACT NO. 81-46-68-16

Principal Staff: Dr. Paul Miller, Department of Economics

Project Title: The Role of Farm Labor Market Institutions in the Lower Rio Grande Valley of Texas

Objectives and Procedures: This study analyzes the recruitment of farm labor in the Lower Rio Grande Valley of Texas, where there is a decreasing demand for unskilled farm labor, increasing mechanization, an uncertain supply of trained agricultural technicians, a high proportion of generally unskilled minority group members (primarily Mexican Americans), and relatively heavy dependence on farm employment. This study attempts to identify and determine the causes of the Valley labor force's unemployment, underemployment, and mobility and to isolate factors—particularly those related to labor market institutions—hindering job market adjustments. The study also considers problems resulting from dayworkers' commuting from Mexico, and the unusual concentration of farmworkers who winter in the Valley but work in other areas during harvest season.

Information is being obtained from present and former farmworkers; recruiters and employers; and community, business, labor, and government leaders.

Status of Project: The project is scheduled for completion in December 1969.

1.1.51 TRANSCENTURY CORP.
WASHINGTON, D.C.

CONTRACT NO. 81-09-69-08

Principal Staff: David S. North

Project Title: Some New Insights into the Green Card Commuters

Objectives and Procedures: This study seeks to clarify the economic and manpower effects of the employment of "green card" commuters—Mexican citizens who live in Mexico and commute to jobs in U.S. areas close to the Mexican border. Data collection and analysis consist of the following: (1) A review of existing materials, with emphasis on transcripts of recent proceedings of the Select Commission on Western Hemisphere Immigration, the Inter-Agency Committee on Mexican American Affairs, the U.S. Senate Subcommittee on Immigration, and the U.S. Commission on Civil Rights; (2) interviews with border-area government officials, employers, and community and union leaders who are knowledgeable about the commuter traffic; (3) an analysis of data from the annual alien registration of the U.S. Immigration and Naturalization Service; and (4) interviews with "green card" commuters to obtain such data as demographic characteristics, education and training, employment experience in the United States, expenditure patterns, U.S. tax payments and social security contributions, and draft status.

Status of Project: The project is scheduled for completion in November 1969.

1.1.52 THE URBAN INSTITUTE
WASHINGTON, D.C.

CONTRACT NO. 82-09-68-44

Principal Staff: Dr. Charles C. Holt

Project Title: The Urban Institute

Objectives and Procedures: As part of its broad-gage program of research on urban problems, the Urban Institute is initiating studies in response to Manpower Administration requirements.

The first proposed study—to develop a transportation model based on analysis of the commuting needs of people in ghetto areas in relation to employment opportunities both within the city and in its suburbs—could not be undertaken because available data proved to be inadequate. Subsequently, the staffs of the Department of Labor and the Institute agreed on a new study investigating the effect of basic relationships in the labor market on the choice of the level and growth of aggregate demand that can be sustained while maintaining low unemployment, low inflation rates, and high earnings.

The study builds upon earlier research by Dr. Charles C. Holt, of the Institute staff, on the relationships between the Phillips Curve, inflation, and unemployment. Although the study deals primarily with measures or relationships, an effort is being made to estimate various economic and noneconomic costs associated with unemployment, unfilled job vacancies, and inflation. The results are expected to provide information relevant to monetary and fiscal policy at the aggregative level and to manpower policies at lower levels of aggregation, although no attempt is being made to evaluate particular government programs. The analysis will ultimately consider policy issues on both the national and local levels.

Status of Project: A final report is due in September 1970.

1.1.53 WAYNE STATE UNIVERSITY
DETROIT, MICH.

CONTRACT NO. 81-24-66-04

Principal Staff: Dr. Ross Stagner, Dr. Reuben Baron, and Dr. Alan Bass, Department of Psychology

Project Title: The Role of Social Reinforcement Parameters in Improving Trainee Task Performance and Self-Concept

Objectives and Procedures: This project seeks to: (1) Identify the motivational conditions that enable unemployed persons to obtain maximum benefit from job retraining; and (2) determine the methods of dispensing social rewards that are most effective in changing the self-image and, therefore, the job performance of trainees.

A series of laboratory experiments was conducted to measure the influence on the self-image and the performance in laboratory tasks of the following factors: Level of past social deprivation, praise of the person versus praise of his performance, abstract versus concrete rewards, consistent versus sporadic rewards, and the effect of rewards administered by the trainee's peer group versus those administered by an authority figure (the experimenter or instructor).

Status of Project: A final report is scheduled for October 1969.

Highlights of Preliminary Findings: Two major conclusions are appearing from this study:

1. Differences in social reinforcement procedures are more relevant to, and have greater effect on, the individual's self-concept than his immediate task performance.

2. Self-concept was usually enhanced more by reinforcement from peers rather than from the experimenters, and by praise rather than criticism.

1.1.54 WAYNE STATE UNIVERSITY
DETROIT, MICH.

CONTRACT NO. 81–24–68–24

Principal Staff: Dr. Hjalmar Rosen and Dr. John E. Theahan, Department of Psychology

Project Title: A Group Orientation Approach to Facilitating the Work Adjustment of the Hard-Core Unemployed

Objectives and Procedures: This study analyzes the effectiveness of two methods of work orientation for hard-core unemployed men newly hired by a large industrial company. Forty-nine such men were randomly assigned to participate either in the company's customary job orientation program or in experimental, professionally conducted group meetings, structured to encourage free expression of attitudes and emotions growing out of their work and life situations. The two groups were then compared with respect to turnover, work performance, events, and attitudes related to work adjustment, and underlying factors affecting decisions to leave the organization. Supplementary information was obtained in interviews with coworkers, supervisory and managerial personnel, and union officials.

Status of Project: Completion is scheduled for August 1969.

Highlights of Preliminary Findings: The company's standard orientation program proved to be superior to the experimental program in almost all of the measures of effectiveness: (1) Although the 6-month turnover rates were comparable for the total hard-core group and regular new employees in equivalent job categories, turnover was significantly lower for those in the company-administered orientation program than for those in the experimental program; (2) both regular new employees and the company-trained group of the hard-core had significantly lower rates of unauthorized absences than the experimental group; (3) 3 months after hire, a significantly higher proportion of company-trained employees than of the experimental group were recommended for merit increases by their supervisors. The researcher attributed the apparently greater success of the company program to its ability to help workers cope with specific work-related problems.

1.1.55 WAYNE STATE UNIVERSITY
DETROIT, MICH.

CONTRACT NO. 81–24–68–35

Principal Staff: Dr. Hjalmar Rosen, Dr. Gerald Cooke, and Dr. Lynn B. Anderson, Department of Psychology

Project Title: On-the-Job Orientation of Negro Skill Center Trainees and Their Supervisors

Objectives and Procedures: This study is analyzing the effectiveness of an on-the-job orientation program instituted by a large public communications company to assist disadvantaged Negroes hired by the company after they completed a skill center training course. The orientation features role-playing in group problem-solving sessions of supervisors and employees. Half of the newly hired workers are participating in these sessions, and half are not, and half of each of these groups are being assigned to supervisors participating in the orientation sessions and half to supervisors who are not participating. Comparisons are being made of retention and work performance ratings for the four groups, to provide measures of the effect of the supervisors' as well as the employees' orientation.

Status of Project: Completion is scheduled for May 1970.

1.1.56 THE UNIVERSITY OF WISCONSIN
MADISON, WIS.

CONTRACT NO. 81–53–68–41

Principal Staff: Dr. Gerald G. Somers and Dr. J. Kenneth Little, The Center for Studies in Vocational and Technical Education

Project Title: North American Conference on Cost-Benefit Analysis of Manpower Policies

Objectives and Procedures: A North American seminar on conceptual, analytical, and technical problems related to the cost-benefit analysis of manpower policies was conducted in May 1969 by the University of Wisconsin, in conjunction with Queen's University, Kingston, Ontario, Canada, at the Wisconsin campus. The seminar explored methodological problems and sought ways to improve cost-benefit analysis.

Status of Project: A report on conference proceedings is expected in January 1970.

1.1.57 WOMEN'S BUREAU
U.S. DEPARTMENT OF LABOR
WASHINGTON, D.C.

CONTRACT NO. 81–08–22

Principal Staff: Mrs. Mary Hilton

Project Title: Women Workers: Their Special Training Needs

Objectives and Procedures: This project explores the ways in which training could alleviate some of the major problems faced by women in the labor force. The study focuses on women suffering economic disadvantages and those with other special problems, such as returning to the labor force after having devoted a number of years to the care of their families.

Status of Project: Completion is scheduled for December 1969.

1.1.58 YALE UNIVERSITY
NEW HAVEN, CONN.

CONTRACT NO. 81–07–69–22

Principal Staff: Dr. M. Harvey Brenner, School of Medicine

Project Title: Time-Series Analyses of the Relationship Between Selected Economic and Social Indicators

Objectives and Procedures: This study seeks to identify major individual and social correlates and consequences of short-term and long-term changes in employment, unemployment, and earnings. It focuses on the impact of such changes on health and medical care, family life, demographic change, and crime and correction, in New York State and the United States as a whole.

Techniques of time-series analysis and comparative historical analysis are being used to identify and measure the significant effects of changes in the economic indicators on the social indicators, establish the timing pattern of the relationships, and develop methods for anticipating the impact of potential trends and fluctuations in the economic indicators.

Status of Project: Completion is scheduled for June 1970.

1.2 PROJECTS ACTIVE ON JUNE 30, 1969—Manpower Research Institutional Grants Under the MDTA

This section describes the first 3-years' progress of colleges and universities conducting research programs under 5-year manpower research institutional grants. (More extensive information is available in *The Manpower Research Institutional Grant Program: The First Three Years,* available from the Manpower Administration. Applications for new institutional grants will be accepted until December 1, 1969. See guidelines, section 4.2.)

1.2.01 ATLANTA UNIVERSITY
ATLANTA, GA.

GRANT NOS. 91–11–66–60
91–11–67–31
91–11–68–63
91–11–69–57

Principal Staff: Dean Harding B. Young, Institutional Representative, and Dr. K. K. Das, Director, Center for Manpower Studies

Major School or Department: Graduate School of Business Administration

Research: Student and faculty research has focused on the manpower problems of the Southeast, with emphasis on Negroes as white-collar workers and as graduates of various manpower training programs. Major regional projects are tracing the relationship between economic growth and employment trends in the Southeast; and Negro versus white perceptions of the availability of employment in the South. (The latter study is being executed under a Manpower Administration grant—see **1.4.01**.)

Completed studies on white-collar employment of Negroes concerned management training programs in two Atlanta discount department stores and Negroes as managers of urban programs. Current studies seek to: (1) Develop a manual for private industry's use in recruiting and promoting Negro professionals; and (2) examine the employment patterns of Negroes in Atlanta during the 1960's, particularly in white-collar occupations.

Two projects examined the employment experience of training graduates of Atlanta's MDTA program and Carver Vocational High School, respectively. In progress is a study on the relevance of Neighborhood Youth Corps work experience to enrollees' development of job skills.

Program: A manpower specialty, requiring completion of three manpower-related courses, was instituted as part of the master's degree programs in business administration, sociology, and social work. Center personnel recently proposed to the university a more extensive interweaving of the manpower and business administration curriculums.

Initially, the center superimposed a manpower orientation on two business administration courses. By the 1968-69 academic year, the center was offering eight manpower-related courses.

To supplement this curriculum, a noncredit course in research methodology was offered. In 1969 a weekly lecture and discussion series was instituted to enable students to discuss their own research and to familiarize them with manpower planning and policy as presented by speakers from different levels of government and private industry. In addition, students did field work and provided other assistance to professors performing research.

1.2.02 IOWA STATE UNIVERSITY OF SCIENCE AND TECHNOLOGY
AMES, IOWA

GRANT NOS. 91–17–66–61
91–17–67–32
91–17–68–64
91–17–69–58

Principal Staff: Dr. Edward B. Jakubauskas, Director, Industrial Relations Center

Major School or Department: Department of Economics

Research: To maximize its long-run effectiveness, the center's research has centered on six major subject areas, with relevance, whenever possible, to Iowa and the surrounding region.

1. Health manpower. A study was completed on nursing as a critical health occupation and the potential of collective bargaining for relieving the shortage of nurses. Another project is examining turnover, absenteeism, and labor force behavior of nurses. A series of studies is being carried out on career choice in the medical field.

2. Occupational employment forecasting. The first five in a series of semiannual job vacancy listings for Iowa manufacturing have been published. A study of Iowa's manpower requirements for 1975 has been completed. In addition, a manual was prepared to enable local groups to conduct manpower supply surveys for multicounty areas.

3. Managerial and leadership performance. Managerial style has been examined as it affects performance, influences the supervisory style of subordinates, and functions among hospital workers.

4. Collective bargaining and labor laws. A major study is being executed on the shortage of arbitrators and efficient use of their limited supply.

5. Manpower program evaluation. Findings from a study of on-the-job training and the older worker have been presented before the U.S. Senate Special Committee on Aging. Job training priorities in Iowa are being related to the State's vocational school system under a Manpower Administration dissertation grant (see **1.3.39**). In addition, evaluation of the Governor's program for employment of youth is being executed under a contract with the Iowa Manpower Development Council.

6. Labor force behavior. Studies have been completed on: (1) Modes of withdrawal from the labor force by farmers, small town merchants, professionals, and factory workers age 50 and older; and (2) the employment readiness of married women among disadvantaged Iowa families in nonmetropolitan areas.

Program: An interdisciplinary master's degree program in industrial relations was instituted in 1966, and a concentration in labor and manpower economics was recently established for the Ph. D. program in economics. Students earning master's degrees in economics, psychology, sociology, government, and industrial engineering, as well as those earning Ph. D.'s in the first three fields, pursue manpower studies for credit.

A graduate and an undergraduate course in manpower economics have been given during each of the last 3 years, and a course on manpower utilization in developing nations will be offered in the 1970–71 academic year. To supplement these courses and student research activities, manpower experts from government, industry, and other schools have spoken to faculty and student groups frequently.

In the last year, the center held the third in a series of nondegree summer manpower research institutes to promote research activity at colleges and universities in the six-State Great Plains region. In addition, it cosponsored with the university's Engineering Institute a 2-day conference for personnel and industrial relations practitioners.

1.2.03 UNIVERSITY OF MAINE
ORONO, MAINE

GRANT NOS. 91–21–66–63
91–21–67–34
91–21–68–66
91–21–69–60

Principal Staff: Dr. David H. Clark, Director, Manpower Research Project

Major School or Department: Departments of Psychology and of Sociology and Anthropology; College of Business Administration, including Economics and Business Management

Research: The State of Maine has been used as a laboratory for studying problems of manpower development and low income in a mature semirural economy. Within this scope, faculty and student research has focused on how well human resources are being utilized in Maine, especially among the fully employed. A pilot study on utilization was conducted in 1967, and in 1968, 819 prime working-age men in 12 Maine communities were surveyed. Migration, as it has influenced the State's labor force, has been examined in a number of studies. The 1968 survey also explored a basic psychological variable related to manpower utilization, the need to cope with the environment.

Some project research has focused on the demand side of the labor market. State occupational projections to 1975 are being made under a contract with the Governor's office and the Maine Employment Security Commission. The methods communities have used to attract industry and the manpower experiences of the firms which have located in Maine are also being examined.

Program: An interdisciplinary manpower research seminar, introduced in 1966, has acquainted students with manpower problems and initiated them into manpower research. This two-semester workshop has attracted graduate students from psychology, sociology, education, economics, and business administration.

1.2.04 NORFOLK STATE COLLEGE
NORFOLK, VA.

GRANT NOS. 91–49–66–66
91–49–67–37
91–49–68–69
91–49–69–63

Principal Staff: William L. Craig, Director, Manpower Research Institute

Major School or Department: Departments of Business Administration, Industrial Education, Economics, Psychology, Sociology, and Geography-History

Research: The principal subject of research has been manpower underutilization in the Tidewater-Hampton Roads area of Virginia. After a pilot study on underutilization, an areawide study was conducted and data are being analyzed.

To parallel and complement a project at North Carolina State University's manpower center (see **1.2.05**), an examination was undertaken of racial differences in jobseeking patterns of low-income individuals in the locality.

Program: A two-semester seminar has introduced undergraduate students in various disciplines to manpower problems and research. Presentations have been made both by faculty members and representatives of management, labor, and Community Action agencies. The seminar has counted toward degrees in manpower-related disciplines.

On April 11, 1969, Norfolk State College held its third annual symposium for manpower specialists and community leaders in government, private industry, and labor unions. Under discussion was the optimum utilization of manpower in the Tidewater area.

1.2.05 NORTH CAROLINA STATE UNIVERSITY, RALEIGH
RALEIGH, N.C.

GRANT NOS. 91–35–66–65
91–35–67–36
91–35–68–68
91–35–69–62

Principal Staff: Dr. William D. Toussaint, Head, Department of Economics, and Dr. Robert M. Fearn, Institutional Representative

Major School or Department: Department of Economics

Research: Research has been clustered in several areas.

1. Lifetime earnings and old age. Since 1966 continuing research has been conducted on existing lifetime patterns of leisure and work. Aspects explored include differences among occupations in the time patterns of income and work, synchronization of income with family "needs," and policies for adjusting the time path of income.

2. Labor force characteristics of peripheral workers. At the request of the Equal Employment Opportunity Commission, a study was carried out on emerging

employment opportunities for Negroes in the textile industry of the Carolinas. Racial employment practices in Wake County, N.C., are being examined in cooperation with the Governor's Good Neighbor Council. After NCSU researchers found no significant differences between whites' and nonwhites' jobseeking methods in Raleigh, Norfolk State College undertook a parallel investigation in their locality (see **1.2.04**).

A major continuing project has focused on the factors influencing teenagers' choices between school and labor force participation. A series of studies has been conducted on the employability of mothers receiving Aid to Families with Dependent Children (AFDC). One such study, prepared for the President's Commission on Income Maintenance Programs, isolated variables influencing the work efforts of AFDC mothers in three States.

3. Human resources in international and regional development. Several studies have been conducted to test the hypothesis that America's foreign commercial policy (tariff structure) is generally more protective of industries with high concentrations of unskilled labor than of other industries. Another project is investigating human resource development according to the pattern of industrialization in various regions of the United States.

Regarding health manpower, one project has been completed on the economic and social determinants of the availability of health services in various regions. Another study is relating an area's attractiveness as a place of practice and its training efforts to the influx of health practitioners.

4. Geographic migration. Several evaluations have been completed of a State worker relocation program. Currently a model is being constructed of interstate flows of college students.

5. The economics of education. A recently completed study has compared rates of return from schooling and on-the-job training in the South.

Program: Labor economics and human resource development has been established as a new field of specialization for a Ph. D. in economics. This specialization requires enrollment in two manpower-related seminars—in human capital and in labor economics and manpower problems—and participation in the research workshop, where professors and graduate students discuss inhouse research plans and results and visiting manpower experts make presentations.

1.2.06 OKLAHOMA STATE UNIVERSITY OF AGRICULTURE AND APPLIED SCIENCE, RESEARCH FOUNDATION

STILLWATER, OKLA.

GRANT NOS. 91-38-66-64
91-38-67-35
91-38-68-67
91-38-69-61

Principal Staff: Dr. John C. Shearer, Director, Manpower Research and Training Center

Major School or Department: College of Business, Department of Economics

Research: The center's research has considered primarily the manpower problems relevant to its location. A major concern in the last 3 years has been occupational education beyond high school in Oklahoma. Based on a statewide analysis of technical training programs and the mobility of their graduates, the researchers planned a system for such education as part of a manpower development program for the State. At present, an occupational training information system is being developed under a Manpower Administration contract (see **1.1.41**).

Concern with the State's economy and special populations is reflected in a current study of sources of recent economic growth, and in two evaluations of the training offered American Indians through the U.S. Bureau of Indian Affairs. (One of the latter was completed under a Manpower Administration dissertation grant; see **3.2.28**.) Two studies have dealt with labor force participation of residents in the Ozark area of northeast Oklahoma.

On health manpower, a current project is analyzing the potential of discharged military corpsmen for use in civilian health occupations. Another project examined utilization of female registered nurses.

Jobseeking is being examined in two projects: (1) An experimental program under which selected registrants at public employment service offices are given supplemental labor market information (see **1.1.42**, a Manpower Administration contract); and (2) a comparison of labor market information, jobseeking behavior, and socioeconomic mobility of Negro and white college graduates.

Program: Manpower Fellows, who receive substantial financial support, have been required to complete a number of manpower courses as well as their master's degree work in economics, psychology, sociology, or technical education. In addition, they have served research internships on major projects quarter time during the academic year and full time during the summer between their 2 years of master's degree work. Supplementing their classroom and research experience were visiting lecturers and a series of field trips to research project sites.

1.2.07 TEMPLE UNIVERSITY
PHILADELPHIA, PA.

GRANT NOS. 91–40–66–62
91–40–67–33
91–40–68–65
91–40–69–59

Principal Staff: Dr. Louis T. Harms, Director, Manpower Research Institutional Grant Program

Major School or Department: Department of Economics, School of Business Administration

Research: Completed labor force studies include the following: (1) An exploration of trends in the size and composition of the American labor force; (2) development of annual estimates of the resident labor force by county in Pennsylvania for 1940–63, and projected for 1970, 1975, and 1980; (3) identification of characteristics of labor force nonparticipants among prime-age men in Philadelphia (under a separate Manpower Administration grant; see **2.3.15**); and (4) investigation of the role of personal income-tax policies in manpower relocation.

Current studies related to a 1967-68 seminar series on collective bargaining explore the impact of school decentralization on teacher bargaining and the current status of collective bargaining in the performing arts, and in Federal, State, and local governments. Social welfare programs have been considered in various aspects, including the employability of such welfare recipients as mothers receiving Aid to Families with Dependent Children.

Case studies underway on the Philadelphia urban area explore: (1) How employment in geographic sectors is affected by the nature of the firms which enter, leave, and relocate within the city (under a Manpower Administration contract; see **1.1.49**); and (2) food purchasing behavior of 30 low-income families.

Industry studies have focused on manpower projections in banking, in the context of technological change, and the impact on the community of several textile mill closings.

Program: A concentration in manpower studies was instituted in 1966 for both the master's degree and the Ph. D. in economics. Under the Master of Business Administration program, students may focus on industrial or labor relations or (due to the recent efforts of center faculty members) on health administration.

Eleven graduate manpower courses have been added to the economics curriculum since the Institutional Grant Program began, and five manpower-related courses have been introduced in the Department of Management. In conjunction with this curriculum, manpower experts have made presentations at monthly luncheons to graduate students, faculty members, and representatives from business, government, and other schools.

Faculty members have organized and participated in four conferences during the last year: (1) Urban Entrepreneurship Opportunities Conference—for bankers, businessmen, and ghetto residents; (2) Social Economics: Agenda for Americans—for public officials; (3) Developing Community Responsibility—for community leaders; and (4) Human Rights, Human Resources, and Social Progress—for persons involved with the International Labour Organisation.

1.3 PROJECTS ACTIVE ON JUNE 30, 1969—Doctoral Dissertation Grants Under the MDTA [10]

1.3.01 BOWLING GREEN STATE UNIVERSITY

BOWLING GREEN, OHIO

GRANT NO. 91–37–69–16

Doctoral Candidate: Stephen Wollack, Department of Psychology

Sponsor: Dr. Patricia C. Smith

Dissertation: The Effects of Work Rate Upon Job Satisfaction

Objectives and Procedures: This study tests the hypothesis that a worker's job satisfaction is greatest when there is little discrepancy between his normal rate of work and a machine-dictated work pace. In a laboratory situation, subjects with experience as industrial workers and clerks are to perform assembly or stamping operations (appropriate to their backgrounds) at their own pace and then at dictated rates. A series of scales is being used to assess job satisfaction, boredom, and level of effort.

Estimated Completion Date: October 1969

1.3.02 BOWLING GREEN STATE UNIVERSITY

BOWLING GREEN, OHIO

GRANT NO. 91–37–69–17

Doctoral Candidate: Frank J. Landy, Department of Psychology

Sponsor: Dr. Robert M. Guion

Dissertation: A Typological Approach to the Relationship Between the Motivation to Work and Job Satisfaction

Objectives and Procedures: This study attempts to develop typologies of job satisfaction and motivation among 400 engineers who have held their college degrees for up to 8 years and who work for a single organization. Data on: (1) The engineers' job descriptions, job satisfaction, orientation, values, and activity levels (as reported by them in questionnaires); (2) peers' ratings of effort; and (3) superiors' evaluations of performance are being used in an effort to construct measures of motivation that can predict job satisfaction.

Estimated Completion Date: September 1969

1.3.03 BRANDEIS UNIVERSITY

WALTHAM, MASS.

GRANT NOS. 91–23–66–59
91–23–67–45

Doctoral Candidate: Jane Gaudette Jones, The Florence Heller Graduate School for Advanced Studies in Social Welfare and Heller Research Center

Sponsor: Dr. Stephen J. Miller

Dissertation: The Career Patterns of Women Physicians

Objectives and Procedures: This study is identifying factors which motivate women to enter the medical profession and obstacles which they must overcome.

A sample of women students, dropouts, and graduates of the medical schools of Boston University, Tufts University, Radcliffe College, and Harvard University is being interviewed about career decisions and about personal and professional career patterns. Key persons in medical education are also being interviewed.

Estimated Completion Date: By June 1970

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[10] Requests for information concerning these dissertations should be directed to the doctoral candidates.

1.3.04 BRANDEIS UNIVERSITY
WALTHAM, MASS.

GRANT NO. 91–23–68–45

Doctoral Candidate: Lynda L. Holmstrom, Department of Sociology

Sponsor: Dr. Everett C. Hughes

Dissertation: The Intertwining Career Patterns of Husbands and Wives in Certain Professions

Objectives and Procedures: This analysis of factors that enable or prevent labor force participation by married women with Ph. D. degrees gives special attention to the influence of the husbands' work situations and attitudes. Data are being examined in light of marriage-career stereotypes prevalent in sociological literature and structural features of society which tend to produce conflict between career and family pursuits. Fifteen wives pursuing their careers and 15 wives curtailing their careers are being interviewed, together with their husbands. The women typically earned their Ph. D.'s in the humanities or sciences, are 35 years of age or older, and live within the Greater Boston area.

Estimated Completion Date: October 1969

1.3.05 BRANDEIS UNIVERSITY
WALTHAM, MASS.

GRANT NO. 91–23–68–46

Doctoral Candidate: Donald W. Light, Jr., Department of Sociology

Sponsor: Dr. Morris S. Schwartz

Dissertation: The Training of Psychiatrists

Objectives and Procedures: This study seeks to answer the question, "How are psychiatrists being trained and how does this training meet the need of society for psychiatric manpower?" The study setting is the Harvard program at the Massachusetts Mental Health Center, which combines a psychoanalytic orientation with physiological and community aspects of psychiatry. The focus is the relationship of the structure of the training program to the skills a resident acquires, the techniques he learns, the career he chooses, and the rationale he will employ in his practice. Information on the training is being gathered by participant observation, supplemented by interviews and questionnaires covering specific problems encountered in field work. In analyzing the data, comparisons are being made with the findings of several studies of other psychiatric residency programs.

Estimated Completion Date: February 1970

1.3.06 UNIVERSITY OF CALIFORNIA, BERKELEY
BERKELEY, CALIF.

GRANT NO. 91–05–68–04

Doctoral Candidate: John S. Spier, Department of Sociology

Sponsor: Dr. Robert Blauner

Dissertation: Racial Integration in the Railroad Operating Crafts

Objectives and Procedures: This study is examining conditions which cause Negroes to succeed or fail in a previously all-white industry when employment is opened to them. Railroad operating crafts in the San Francisco Bay area, virtually closed to nonwhites until the early 1960's, provide the work setting for the study.

The researcher is attempting to interview the approximately 75 Negroes hired for such jobs since the early 1960's (whether still employed or not). These interviews cover job history and aspirations, education, family background, and reasons for leaving the railroad (where applicable). Comparative data are being collected from 25 white employees in the craft, who are being queried in addition concerning their views of Negroes as coworkers and whether their attitudes have changed since the preintegration period. Additional material is being obtained through interviews with local union and company officials.

Estimated Completion Date: By June 1970

1.3.07 UNIVERSITY OF CALIFORNIA, BERKELEY
BERKELEY, CALIF.

GRANT NO. 91–05–68–05

Doctoral Candidate: Ivan H. Light, Department of Sociology

Sponsor: Dr. Martin A. Trow

Dissertation: Self-Employment and Education as Avenues of Social Mobility for Chinese, Japanese, and Negroes in Urban Areas

Objectives and Procedures: This is a comparative and historical examination of the roles of business proprietorship and of education in the social mobility of three nonwhite groups: Chinese Americans, Japanese Americans, and Negroes. The researcher is determining rates of mobility through self-employment and through education for each group at different historical points. The causes and consequences of the predominance of proprietorship or of education as a means of social ascent are being considered in view of the present difficulties faced by each group.

The study is limited primarily to the San Francisco Bay area. Historical research, using library sources and public records, is being supplemented by interviews with minority group leaders in the area.

Estimated Completion Date: September 1969

1.3.08 UNIVERSITY OF CALIFORNIA, BERKELEY
BERKELEY, CALIF.

GRANT NO. 91–05–68–70

Doctoral Candidate: Robert J. Flanagan, Department of Economics

Sponsor: Dr. Lloyd Ulman

Dissertation: International Differences in Non-Cyclical Unemployment

Objectives and Procedures: This study seeks to determine why the rate of unemployment associated with price stability is considerably higher in the United States than in some European countries. Several hypotheses on labor policies and seasonal, frictional, and structural unemployment are being tested to determine their influence on international differences in unemployment, using unpublished as well as published data on wages, profits, cost of living, and aggregate unemployment rates for Great Britain, Sweden, and the United States.

Estimated Completion Date: By June 1970

1.3.09 UNIVERSITY OF CALIFORNIA, BERKELEY
BERKELEY, CALIF.

GRANT NO. 91–05–69–01

Doctoral Candidate: Jeffrey M. Schevitz, Department of Sociology

Sponsor: Dr. Harold L. Wilensky

Dissertation: Social and Psychological Impact of Worklife Instability

Objectives and Procedures: This study examines the long-term social and psychological impact of varying amounts of worklife instability, based on a mail survey of 1,200 engineers and scientists and 1,200 skilled workers—both split between defense and commercial work. Worklife instability is defined as downgrading, frequent job changes, or layoffs resulting from technological obsolescence or cancellation of defense contracts. The study is attempting to find ways of minimizing the negative effects of worklife instability. The researcher postulates that an individual's response to worklife instability depends primarily on his attribution of blame for the instability; his career orientation; and aspects of the work role, organization, and industry within which he locates reemployment.

Estimated Completion Date: March 1970

1.3.10 UNIVERSITY OF CALIFORNIA, BERKELEY
BERKELEY, CALIF.

GRANT NO. 91–05–69–53

Doctoral Candidate: Stephen R. Engleman, Department of Economics

Sponsor: Dr. Lloyd Ulman

Dissertation: Cost and Performance Incentives for Office of Economic Opportunity Job Corps Contractors

Objectives and Procedures: This study examines the efficiency of contractual arrangements between the Office of Economic Opportunity and private corporations or nonprofit institutions for operating Job Corps centers, which provide training and other services to disadvantaged youth in a residential environment. (Responsibility for the Job Corps program was transferred from OEO to the U.S. Department of Labor on July 1, 1969.) Job Corps and extensive Department of Defense experience with cost-plus-fixed-fee contracts is being analyzed for costs and performance. Mathematical formulation of Job Corps goals is being constructed, and an incentive program derived which would both maximize profit for the contractor and yield cost results and goal fulfillment superior to those attained under the present contracting system.

All Job Corps center contracts are being examined, and data collected from OEO on contractor performance. Several centers are being visited, and interviews conducted with officials of the Government and the contractor.

Estimated Completion Date: June 1970

1.3.11 UNIVERSITY OF CALIFORNIA, BERKELEY

BERKELEY, CALIF.

GRANT NO. 91–05–69–54

Doctoral Candidate: Michael J. Boskin, Department of Economics

Sponsor: Dr. George F. Break

Dissertation: The Working Behavior of the Urban Poor

Objectives and Procedures: This study attempts to estimate the effects of proposed income maintenance programs, such as the negative income tax, wage subsidies, or family allowances, on the work behavior of the urban poor. A labor supply curve for the urban poor is being derived. Equations relating workers' demographic characteristics to their wages are being used to estimate potential earnings for persons not actually working, as a basis for assessing the work incentives that would be associated with various proposals for income maintenance. Data are being drawn from a 1968 survey by the Department of Labor.

Estimated Completion Date: June 1970

1.3.12 UNIVERSITY OF CALIFORNIA, LOS ANGELES

LOS ANGELES, CALIF.

GRANT NOS. 91–05–66–09
91–05–67–18

Doctoral Candidate: Robert Singleton, Department of Economics

Sponsor: Dr. Jack Hirshleifer

Dissertation: Labor Force Composition and the Minimum Wage

Objectives and Procedures: This study is testing the proposition that increases in the minimum wage cause unemployment among such groups as the young, older workers, nonwhites, and the inexperienced. Department of Labor and Social Security Administration data on low-wage workers are being analyzed.

Estimated Completion Date: By June 1970

1.3.13 UNIVERSITY OF CALIFORNIA, LOS ANGELES

LOS ANGELES, CALIF.

GRANT NO. 91–05–69–08

Doctoral Candidate: Dwayne Schramm, School of Education

Sponsor: Dr. S. J. Wanous

Dissertation: The Older Woman Worker Who Has

Attempted to Enter or Reenter the White Collar Labor Force through Community Training Programs

Objectives and Procedures: This study is assessing the effectiveness of community training programs in assisting women 35 years or older to enter or reenter clerical or secretarial occupations. It seeks to determine women's reasons for entry (or reentry) into the labor force, their job satisfaction, the adequacy of their training, and their employers' satisfaction with their performance. Information is being obtained from older women who have participated in the specified types of training programs in Fresno, Calif., and from their employers.

Estimated Completion Date: By June 1970

1.3.14 CASE WESTERN RESERVE UNIVERSITY
CLEVELAND, OHIO

GRANT NO. 91–37–69–56

Doctoral Candidate: Stephen D. Kornblatt, Division of Special Interdisciplinary Studies

Sponsor: Dr. Eugene S. Uyeki

Dissertation: Factors Affecting the Hiring and Training of Hard-Core Unemployed in the Greater Cleveland Area: A Study in Culture Confrontation

Objectives and Procedures: This study examines the relationship between the organizational structures, attitudes, procedures, and policies of companies employing the hard-core unemployed and the firms' success in hiring, retaining, and advancing these workers, whose culture differs materially from that of their coworkers. At about 60 companies in the Cleveland metropolitan area, representing the spectrum of success, interviews are being conducted with representative executives, managers, union leaders, and coworkers. Additional data on the companies and their new hard-core employees are being obtained through offices operating local manpower programs.

Estimated Completion Date: June 1970

1.3.15 THE UNIVERSITY OF CHICAGO
CHICAGO, ILL.

GRANT NO. 91–15–68–76

Doctoral Candidate: Laurence E. Devlin, Department of Education

Sponsor: Dr. William S. Griffith

Dissertation: Participation in Adult Education and Occupational Mobility

Objectives and Procedures: This study seeks to discover whether participation in formal adult education courses is positively related to occupational mobility. Interviews are being conducted with 200 employed adult men, either residents of a blue-collar suburb of Chicago where a junior college adult education program is located, or registrants in that program. The interviews focus on the incidence of participation in adult education courses and the number and socioeconomic level of all job moves. Secondary data on demographic characteristics, occupational perceptions, early educational experiences, and social behavior are also being collected.

Estimated Completion Date: December 1969

1.3.16 CLAREMONT GRADUATE SCHOOL
CLAREMONT, CALIF.

GRANT NO. 91–05–68–49

Doctoral Candidate: William H. Lawson, Department of Economics

Sponsor: Dr. Paul Sultan

Dissertation: Short-Term Manpower Projections for Certain Entry-Level Occupational Positions in Selected Industries in Ventura County, Calif.

Objectives and Procedures: This pilot study examines problems of adapting a national manpower projection technique, the industry-occupational matrix developed by the Bureau of Labor Statistics (see **3.1.49**), to the local level. The research setting is Ventura County, Calif., an area which has rapid growth potential. Using the industry-occupational matrix approach, projections of demand in three service industries (health, personal, and miscellaneous repair) are being developed for the period from mid-1965 to mid-1968 for six entry-level jobs requiring less than a bachelor's degree. The validity of this method of projecting local manpower needs is being evaluated through comparisons with projections developed by other techniques and with actual employment figures.

Estimated Completion Date: July 1969

1.3.17 CLAREMONT GRADUATE SCHOOL
CLAREMONT, CALIF.

GRANT NO. 91-05-69-22

Doctoral Candidate: Donald E. Wise, Department of Economics

Sponsor: Dr. Paul Sultan

Dissertation: Bracero Labor and the California Farm Economy

Objectives and Procedures: This study attempts to measure the effects of the 1964 repeal of Public Law 78, which allowed Mexican nationals to work in the United States on a temporary basis, on California agriculture (production, wages, technology, and wholesale crop prices). It is developing a model to describe the aggregate supply and demand functions for six crops which had made substantial use of bracero labor, based on time-series data for 1960–68 from a variety of sources.

Estimated Completion Date: November 1969

1.3.18 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NO. 91-34-66-31

Doctoral Candidate: Myron D. Fottler, Graduate School of Business

Sponsor: Dr. James W. Kuhn

Dissertation: Training of Nonprofessional Manpower in New York City Hospitals

Objectives and Procedures: This study is evaluating retraining programs for nonprofessional hospital workers, particularly practical nurses, nurse aids, and orderlies. Training needs are being determined by examining the relationships among wage rates, necessary skills, sources of manpower supply, and occupational shortages. The evaluation of training effectiveness is being approached through cost-benefit analysis.

Estimated Completion Date: By June 1970

1.3.19 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NO. 91-34-66-37

Doctoral Candidate: Harold Oaklander, Graduate School of Business

Sponsor: Dr. Ivar Berg

Dissertation: Some Unanticipated Effects of Advanced Education on a Critical Manpower Resource, the Inservice Teacher

Objectives and Procedures: This study is examining the effects of school system requirements for public school teachers' pursuit of graduate education on their job satisfaction and turnover rate. Data are being obtained through the New York City Board of Education; the U.S. Department of Health, Education, and Welfare; and the Bureau of the Census.

Estimated Completion Date: By June 1970

1.3.20 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NO. 91-34-67-44

Doctoral Candidate: Thomas F. Wilson, Department of Economics

Sponsor: Dr. Arthur F. Burns

Dissertation: Labor Force Participation and Business Fluctuations: An Analysis by Cyclical Stages

Objectives and Procedures: This investigation explores several aspects of the cyclical behavior of the labor force in order to provide information not now available from typical analyses of labor force participation and business fluctuations. Using household and establishment data for the years 1948–66, and total hours worked as the indicator of tightness in the job market, deviations of the labor force participation rate from trend are being calculated and analyzed for stages of expansion and contraction.

Estimated Completion Date: By June 1970

1.3.21 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NOS. 91–34–68–20
91–34–69–19

Doctoral Candidate: Carol A. Brown, Department of Sociology

Sponsor: Dr. Terence K. Hopkins

Dissertation: Patterns of Recruitment and Career Development of Health Technicians

Objectives and Procedures: This study examines the mobility of medical technicians: the choice process of those who enter the occupation; hiring and entry processes; the technicians' desires for mobility; and the mobility actually offered by the occupation. Characteristics of current technicians are being ascertained, and recommendations will be made for recruitment of new entrants.

Data are being collected in interviews with current and former technicians from two rural, two urban, and two suburban hospitals. Information from their job applications is also being utilized.

Estimated Completion Date: By June 1970

1.3.22 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NOS. 91–34–68–28
91–34–69–18

Doctoral Candidate: Marjorie Hanson Honig, Department of Economics

Sponsor: Dr. Gary S. Becker

Dissertation: The Effect of Welfare Payments on Labor Force Participation

Objectives and Procedures: This study is testing the theory that labor force participation rates of low-income groups decline as the adequacy of welfare programs increases. It explores the relationship between census employment-related data for residents of low-income census tracts in standard metropolitan statistical areas and State data on Aid to Families with Dependent Children. This program offers a fairly clear choice between work and welfare; most of the adult recipients are able-bodied, and welfare rules in the States where most of them live had cost them a dollar of benefits for every dollar earned before some earnings became exempt under the 1967 amendments to the Social Security Act.

Estimated Completion Date: July 1970

1.3.23 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NOS. 91–34–68–47
91–34–69–44

Doctoral Candidate: Sally T. Hillsman, Department of Sociology

Sponsor: Dr. Terence K. Hopkins

Dissertation: Induction Into the Apparel Industry: A Study of Young Negro and White Workers

Objectives and Procedures: This project considers whether and to what extent education equalizes job opportunities for minority groups. It focuses on: (1) The employment experience of different ethnic group graduates of the same curriculums at the High School of Fashion Industries in New York City; (2) the influence of the school's teachers and guidance personnel in channeling students into various paths of the job market; (3) employer and union practices in the job market; and (4) the subjective expectations of jobseekers that affect their career choices.

Statistics on employment and earnings are being obtained through the Social Security Administration. Other information is being gathered through interviews with employers, personnel of the High School of Fashion Industries, the New York State Employment Service, and unions, and through questionnaires administered to the senior class and to recent graduates of the school.

Estimated Completion Date: June 1970

1.3.24 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NO. 91–34–69–11

Doctoral Candidate: Deborah S. David, Bureau of Applied Social Research

Sponsor: Dr. Paul F. Lazarsfeld

Dissertation: Career Patterns and Values: A Study of Men and Women in Scientific, Professional, and Technical Occupations

Objectives and Procedures: This study attempts to pinpoint differences in the career patterns of men and women by comparing such variables as fields of specialization, income, current job activities, occupational qualifications, hours worked per week, and weeks worked per year. The study is also considering how age and sex differences in occupational values affect men's and women's career patterns. Data from the 1962 postcensal survey of scientific, professional, and technical manpower are being used to analyze differences within broad occupational groups as well as among specific occupations.

Estimated Completion Date: June 1970

1.3.25 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NO. 91–34–69–50

Doctoral Candidate: Margit A. Johansson, Bureau of Applied Social Research

Sponsor: Dr. Allen H. Barton

Dissertation: The Differential Effects of Reduced Research Funding on University Scientists

Objectives and Procedures: This study is assessing the impact of recent reductions in Federal research funding at a major university. From interviews, questionnaires, and school records, answers are being sought to such questions as: (1) What are the characteristics of the faculty, nonfaculty, and student researchers who do (or do not) continue to receive Federal support? (2) Which researchers sustain productivity despite fund reductions? and (3) How do fund cuts affect researchers' alternative activities, self-esteem, and relations with colleagues?

Estimated Completion Date: June 1970

1.3.26 CORNELL UNIVERSITY
ITHACA, N.Y.

GRANT NO. 91–34–68–12

Doctoral Candidate: Allan D. Spritzer, New York State School of Industrial and Labor Relations

Sponsor: Dr. Felician F. Foltman

Dissertation: Trade Union Sponsored Programs of Occupational Training in the U.S. Maritime Industry

Objectives and Procedures: This study explores the nature, scope, and results of trade union sponsored programs of occupational training, retraining, and upgrading in the U.S. offshore shipping industry, in an attempt to develop measures of success for these programs.

The objectives, procedures, and results of five union conducted training programs are being studied in interviews with officials connected with those programs. Interviews are also being conducted with officials of other maritime unions which have either less extensive training programs or none at all. Union and Coast Guard records on personal and employment characteristics of current trainees and training program graduates are being supplemented by interviews or mail questionnaires. Shipping employers and government officials are also being interviewed to develop additional criteria of program effectiveness.

Estimated Completion Date: August 1970

1.3.27 CORNELL UNIVERSITY
ITHACA, N.Y.

GRANT NO. 91–34–68–14

Doctoral Candidate: Eliot S. Orton, Department of Economics

Sponsor: Dr. George H. Hildebrand

Dissertation: Components of the Demand for Inexperienced Labor

Objectives and Procedures: This study of the demand for inexperienced workers in a single labor market seeks to identify the reasons that lead employers to hire greater or lesser proportions of inexperienced labor. A random sample of private firms which employ 25 or more workers is being asked to provide the following information for the period 1961 to the third quarter of 1967: Number of accessions to permanent positions; proportion of these who were inexperienced in the broad occupational category for which hired; and the entering wage rate. In addition, the analysis is taking into account variations in the local unemployment rate and in State and Federal minimum wage rates.

Estimated Completion Date: June 1970

1.3.28 CORNELL UNIVERSITY
ITHACA, N.Y.

GRANT NO. 91–34–68–71

Doctoral Candidate: Robert J. Hines, Department of Economics

Sponsor: Dr. George H. Hildebrand

Dissertation: Econometric Model of Labor Supply in Buffalo Market Based on Times Series Contour Analysis

Objectives and Procedures: This study is testing the hypothesis that a firm whose employment growth rate exceeds the average for similar local firms will also show an above-average rate of wage increase for entry-level jobs. It is analyzing employment and wage data for a 10-year period for a sample of employers in the Buffalo, N.Y., standard metropolitan statistical area. Data for individual firms are to be compared with those for groups (contours) of area firms that share such elements as common unions, similar technology, and similar products.

Estimated Completion Date: October 1969

1.3.29 CORNELL UNIVERSITY
ITHACA, N.Y.

GRANT NO. 91–34–69–67

Doctoral Candidate: Ross E. Azevedo, New York State School of Industrial and Labor Relations

Sponsor: Dr. N. Arnold Tolles

Dissertation: The Labor Market for Scientific Personnel: The Problem of Allocation and Efficiency

Objectives and Procedures: This study is describing the allocative function of the labor market for scientists and engineers and evaluating the efficiency with which this market operates. It seeks information on the role of employers, employees, and employment services in the processes by which scientists find their initial and subsequent professional jobs. Information is being obtained through interviews and questionnaires with approximately 30 employers in the New York-New England area; numerous engineers, physicists, chemists, and mathematicians; and seven college placement services and four public employment agencies. In addition, data available from government and professional associations are being used.

Estimated Completion Date: June 1970

1.3.30 DUKE UNIVERSITY
DURHAM, N.C.

GRANT NO. 91–35–68–15

Doctoral Candidate: Norville David Crowder, Department of Sociology and Anthropology

Sponsor: Dr. Joel Smith

Dissertation: The Socioeconomic Assimilation of Southern Born Migrants to Other Regions

Objectives and Procedures: This study is attempting to depict the effects of early life experiences in the South on job market participation of migrants from that region. Comparisons of income, education, and occupational prestige are being made for four groups: (1) Migrants born and educated in the South who now live in another region (for example, the Northeast); (2) migrants born in the South and educated elsewhere, now living in the Northeast; (3) native born, nonsouthern educated residents of the Northeast; and (4) migrants to the Northeast who were born and educated in regions other than the South. The primary source is *Accuracy of Data on Population Characteristics as Measured By Reinterviews,* prepared by the Bureau of the Census in 1964.

Estimated Completion Date: December 1969

1.3.31 THE FLORIDA STATE UNIVERSITY
TALLAHASSEE, FLA.

GRANT NO. 91–10–69–32

Doctoral Candidate: Raul Moncarz, Department of Economics

Sponsor: Dr. Irvin Sobel

Dissertation: The Effect of Environmental Change on Human Capital Among Selected Skilled Cubans

Objectives and Procedures: This study examines the use that is being made by members of Cuban refugee associations of their professional, technical, managerial, and other skills in the United States for relevant occupational groups. Questionnaires are being sent to 100 members of each occupation, and interviews are being conducted with the directors of these associations. The study considers obstacles encountered by these refugees in entering similar or related occupations in America, such as failure of their education to meet skill requirements, lack of reasonably priced retraining programs, or licensing regulations. The analysis takes into account such factors as: Refugees' age at immigration, fluency in English, places of resettlement, and changes in the legal status of refugees between 1959 and the present.

Estimated Completion Date: January 1970

1.3.32 FORDHAM UNIVERSITY
BRONX, N.Y.

GRANT NO. 91–34–68–58

Doctoral Candidate: Eleanor H. Meyer, Department of Sociology and Anthropology

Sponsor: Rev. Joseph P. Fitzpatrick, S. J.

Dissertation: The Occupational Adjustment of Cubans in the West New York, N.J., Area

Objectives and Procedures: This study explores the consequences of Cuban immigration into a small city. The study is identifying demographic characteristics of the immigrants as well as factors that help or hinder their adjustment. Special emphasis is being given to the impact of these immigrants on the local job market and the extent to which they use their previous occupational skills. Data on Cuban refugees in West New York, N.J., are being assembled from the records of schools, hospitals, churches, police, and housing agencies, and a 10-percent sample is being interviewed.

Estimated Completion Date: November 1969

1.3.33 HARVARD UNIVERSITY
CAMBRIDGE, MASS.

GRANT NOS. 91–23–66–16
91–23–67–52

Doctoral Candidate: Llad Phillips, Department of Economics

Sponsor: Dr. John T. Dunlop

Dissertation: Dynamics of Labor Turnover in U.S. Industry

Objectives and Procedures: This study is analyzing the relationship between the dynamics of labor turnover in manufacturing and mining industries and the structure and operation of the labor market in these industries.

Regression analysis is being used to ascertain the economic variables that significantly affect the magnitude and seasonal and cyclical variation of types of labor turnover (e.g., quits and new hires). A mathematical model of labor turnover rates for a particular industry has been constructed, and the results are being compared with turnover rates as compiled by the Department of Labor.

Estimated Completion Date: July 1969

1.3.34 HARVARD UNIVERSITY
CAMBRIDGE, MASS.

GRANT NOS. 91–23–67–42
91–23–69–06
91–23–69–42

Doctoral Candidate: Alexander Korns, Department of Economics

Sponsor: Dr. John T. Dunlop

Dissertation: The Effects of Unemployment and Inflation on Income Distribution in the United States

Objectives and Procedures: This study is examining the impact of changes in unemployment and inflation on the distribution of income; specifically, the redistributive effects of a 1-percentage point increase in the rate of inflation and of a 1-percentage point decline in the unemployment rate. Data are being drawn from estate tax records and a number of Government sponsored or conducted surveys of consumer finances, prices, and labor force behavior. Two factors are being studied for increases in inflation, as measured by the Consumer Price Index: (1) The transfer of wealth from creditors to debtors; and (2) the lag in wages and other remuneration during inflationary periods. Three redistributive effects of changes in unemployment are being considered: (1) Wage losses suffered by persons who lose their jobs; (2) losses in the earnings of factors of production, especially capital; and (3) changes in wage rates.

Estimated Completion Date: June 1970

1.3.35 HARVARD UNIVERSITY
CAMBRIDGE, MASS.

GRANT NO. 91–23–68–57

Doctoral Candidate: Michael L. Wachter, Department of Economics

Sponsor: Dr. John T. Dunlop

Dissertation: A Wage Model of a Local Labor Market

Objectives and Procedures: This study is attempting to construct a model for projecting wage changes that offers a better description of the wage determination process than the commonly used Phillips curve. For the period when the U.S. economy moved from the low growth and high unemployment rates of the 1950's to the rapid growth and low unemployment rates of the 1960's, the researcher is answering the following questions with regard to three labor markets:

1. Did a single wage equation exist over this period?
2. How were wage relationships among firms altered by changes in the job market?
3. How did wages in different occupations react during this period?

Sources of information include wage data since 1957 for the Boston survey group (40 large firms in the Boston area), similar private surveys in a midwestern and a western city, the Bureau of Labor Statistics' occupational wage surveys, and information from the Boston Division of Employment Security.

Estimated Completion Date: September 1969

1.3.36 UNIVERSITY OF ILLINOIS
URBANA, ILL.

GRANT NO. 91–15–66–52

Doctoral Candidate: Edward W. Haurek, Department of Sociology

Sponsor: Dr. Joseph R. Gusfield

Dissertation: Sociological Determinants of College

Aspiration, College Curriculum Choice, and Occupational Aspiration Among Working-Class Adolescents

Objectives and Procedures: This study is testing the hypothesis that the environment of working-class adolescents causes them to differ from middle-class children in the value they place on a college education and in their choice of an occupation.

Data from Project TALENT (explained in **1.3.59**) are being used to compare values and characteristics of middle-class and working-class adolescents. Comparisons include aspirations, achievements, aptitudes, relationship with fellow students, degree of parental supervision, occupational choices, and motivations for college attendance.

Estimated Completion Date: By June 1970

1.3.37 UNIVERSITY OF ILLINOIS
URBANA, ILL.

GRANT NO. 91–15–69–51

Doctoral Candidate: Roger D. Roderick, Institute of Labor and Industrial Relations

Sponsor: Dr. Hugh Folk

Dissertation: An Organizational Analysis of the Hiring of Engineers

Objectives and Procedures: This study applies organization theory to private firms' recruitment and hiring of engineers. It traces firms' development and implementation of hiring goals and recruitment procedures, their adaptation to the short supply of engineers, and their adjustment of future recruitment policies in light of these adaptations. Interviews are being conducted with the recruitment staff at 20 to 25 engineering firms, primarily those engaged in defense operations and research and development. In addition, questionnaires from a sample of June 1969 engineering graduates are being used to validate the firms' reported recruitment practices.

Estimated Completion Date: June 1970

1.3.38 INDIANA UNIVERSITY FOUNDATION
BLOOMINGTON, IND.

GRANT NO. 91–16–68–13

Doctoral Candidate: Robert E. Otlewski, Department of Economics

Sponsor: Dr. Taulman A. Miller

Dissertation: Male Secondary School Teacher Mobility in the State of Indiana

Objectives and Procedures: This analysis of the demographic and economic factors which characterize the geographically mobile teacher, his mobility patterns, and the communications channels used by the teacher and hiring official, is attempting to formulate policy tools which could affect the pattern and incidence of mobility. For male secondary school teachers, statistics collected by the Indiana Department of Public Instruction for the 5 academic years beginning with 1963–64 will be supplemented by questionnaires to: (1) All those who changed school corporations within Indiana during the period June-September 1967; (2) a sample of those who were immobile during that period; and (3) school superintendents in the State.

Estimated Completion Date: By June 1970

1.3.39 IOWA STATE UNIVERSITY OF SCIENCE AND TECHNOLOGY
AMES, IOWA

GRANT NO. 91–17–69–36

Doctoral Candidate: Catherine A. Palomba, Department of Economics

Sponsor: Dr. Edward B. Jakubauskas

Dissertation: Iowa's Job Training Priorities in Terms of Cost-Benefit Analysis and Manpower Projections for 1975

Objectives and Procedures: This study is developing projections to 1975 of Iowa's manpower requirements for 190 occupations. For several of these occupations, the projected demand is being compared with the existing supply in order to rank the occupations by absolute growth. The occupations are also being ranked by net income benefit, as measured by the individual worker's costs and returns. Data are being derived from the 1960 census, U.S. Department of Labor and U.S. Office of Education studies, and Iowa school records. An important use of the study will be to judge how closely vocational training in Iowa has been linked to manpower requirements and how future plans can be brought into line with projected requirements.

Estimated Completion Date: October 1969

1.3.40 THE JOHNS HOPKINS UNIVERSITY
BALTIMORE, MD.

GRANT NO. 91–22–68–23

Doctoral Candidate: Samuel Gubins, Department of Political Economy

Sponsor: Dr. Edwin S. Mills

Dissertation: A Benefit-Cost Analysis Comparing Training of Youth With Adults

Objectives and Procedures: This study attempts to isolate the effects of age and previous education on the costs and benefits of MDTA institutional training of the unemployed. For approximately 500 persons participating in institutional training projects in the Baltimore standard metropolitan statistical area, cost and benefit factors are being computed for the trainee, the Government, and the economy. A matrix is being constructed to show the effect of age on the benefit-cost ratio derived for a given educational attainment, and the effect of education on the benefit-cost ratio derived for a given age group.

Estimated Completion Date: By June 1970

1.3.41 THE JOHNS HOPKINS UNIVERSITY
BALTIMORE, MD.

GRANT NO. 91–22–69–27

Doctoral Candidate: Peter Kobrak, Department of Political Science

Sponsor: Dr. Francis E. Rourke

Dissertation: Private Assumption of Public Responsibilities: The Role of American Business in Urban Manpower Programs

Objectives and Procedures: This study examines the implementation of local Job Opportunities in the Business Sector programs (JOBS). (Under JOBS, cooperating companies hire and train the hard-core unemployed, and the Government reimburses them for the extraordinary costs incurred in training the new disadvantaged employee.) The study considers the JOBS Program as a social system of interacting and interrelated groups. It attempts to develop an approach to program evaluation which allows the assessment and readjustment of program elements according to the program's goals, the trainees' needs, and the employers' requirements.

Interviews are being conducted in New York, Washington, D.C., and Baltimore with members of the following groups associated with the JOBS Program in those communities: The executive goal-setters, the companies' front-line supervisors and personnel staff, trainees, voluntary and public community groups, and governmental and private manpower experts. Questions focus on the goals and methods of each group and decisions made throughout the course of the JOBS Program, particularly those which eventually determined its success or failure.

Estimated Completion Date: December 1969

1.3.42 THE UNIVERSITY OF KENTUCKY RESEARCH FOUNDATION
LEXINGTON, KY.

GRANT NO. 91–19–68–60

Doctoral Candidate: Brian S. Rungeling, Department of Economics

Sponsor: Dr. F. Ray Marshall

Dissertation: Impact of Commuter Aliens on the Garment Industry and Economy of El Paso, Tex.

Objectives and Procedures: For the garment industry in El Paso, Tex., this study is exploring the importance of Mexican commuters, their effect on the wages and employment of American workers, and the potential effects of closing the border to commuters. Data are being gathered through interviews with commuter aliens and with employers who do and do not hire commuters.

Estimated Completion Date: July 1969

1.3.43 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

CAMBRIDGE, MASS.

GRANT NO. 91-23-68-77

Doctoral Candidate: Robert I. Lerman, Department of Economics

Sponsor: Dr. Robert M. Solow

Dissertation: Factors Affecting Youth Unemployment

Objectives and Procedures: This study considers the following questions with regard to the teenage job market in the United States:

1. Why have youth unemployment rates risen relative to adult rates since World War II?

2. What factors contribute to high youth unemployment rates in any given year?

3. Why do youth unemployment rates vary across labor markets?

4. What attributes meaningfully discriminate among employed youth, unemployed youth, and youth not in the labor force?

5. Why does their unemployment rate decline as youth reach their early and middle twenties?

The analysis is using data from the Bureau of Labor Statistics and the Bureau of the Census, and special tabulations from the Office of Economic Opportunity.

Estimated Completion Date: By June 1970

1.3.44 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

CAMBRIDGE, MASS.

GRANT NO. 91-23-69-02

Doctoral Candidate: A. Bradley Askin, Department of Economics

Sponsor: Dr. Robert M. Solow

Dissertation: An Economic Analysis of Selected Aspects of Negro Migration

Objectives and Procedures: This study of selected economic aspects of Negro migration among regions of the country, within counties, and within cities seeks answers to three questions:

1. What key demographic and labor force variables affect the migration decisions of Negroes?

2. What effect does Negro migration have on migrants' income, employment, and public welfare received, after other factors are accounted for?

3. How do the causes and effects of migration differ between northern and southern Negroes?

The study is also examining the effects of such factors as changes in employment and standard of living on Negro migration into urban ghettos. Data are being obtained from the 1950 and 1960 censuses and the 1968 study of major ghetto areas by the Bureau of Labor Statistics.

Estimated Completion Date: June 1970

1.3.45 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

CAMBRIDGE, MASS.

GRANT NO. 91-23-69-39

Doctoral Candidate: Vernon Renshaw, Department of Economics

Sponsor: Dr. Jerome Rothenberg

Dissertation: The Role of Migration in Labor Market Adjustment

Objectives and Procedures: This study tests the hypothesis that the nature of both in- and out-migration from a metropolitan labor area is determined by the interaction of employment opportunities with the strength of local social ties, the information links between one area and another, and the attractiveness of communities, as well as with the population's demographic and occupational structure. The analysis takes into consideration the nature of lags in people's responses to changes in employment opportunities, and national labor market and economic variables. Analysis is based partially on 1960–65 data for a 1-percent sample of social security files, which reflect annual migration and labor force participation in 224 metropolitan labor areas.

Estimated Completion Date: June 1970

1.3.46 MICHIGAN STATE UNIVERSITY
EAST LANSING, MICH.

GRANT NO. 91–24–68–01

Doctoral Candidate: John D. Mason, Department of Economics

Sponsor: Dr. Jack Stieber

Dissertation: The Aftermath of the Bracero: A Study of the Economic Impact on the Agricultural Hired Labor Market of Michigan From the Termination of Public Law 78

Objectives and Procedures: This study is evaluating the effects of the termination, at the end of 1964, of the agreement with Mexico for bringing bracero labor into the United States to fill seasonal needs for farmworkers. For Michigan's agricultural economy, the study is appraising the longrun impact of the termination and adjustments to it in terms of its goals of boosting wages, absorbing unemployment, and enhancing working conditions among domestic hired farmworkers. Current information on the labor demand-supply situation is being obtained to help resolve the question of the relationship between agricultural wage levels and the supply of domestic farmworkers.

About 1,000 returns are expected from questionnaires sent to a sample of 4,000 fruit and vegetable farmers with annual sales over $20,000. The questionnaire requests data on wages, hours, income, and capital substitution. Further data are being collected from relevant public and private records and through interviews with farmers, laborers, bankers, and processors in 20 to 25 geographic subsectors.

Estimated Completion Date: July 1969

1.3.47 MICHIGAN STATE UNIVERSITY
EAST LANSING, MICH.

GRANT NO. 91–24–68–22

Doctoral Candidate: Leonard Lieberman, Department of Sociology

Sponsor: Dr. James B. McKee

Dissertation: The Influence of Job Training, Other Individuals, and Opportunity Structure on the Labor Market Participation of Chippewa and Poor Whites

Objectives and Procedures: The researcher is analyzing the labor force participation rates of 50 Chippewa Indians and 130 poor whites in Michigan prior to and after job training. The analysis attempts to relate occupational mobility after training to job training, opportunity structure, and the influence of other individuals significantly related to the trainees (such as relatives, friends, teachers, or counselors).

Data on trainees have been collected from observation, interviews, and training center records. A comparison group of workers in central Michigan is also being interviewed. Trainees are being reinterviewed approximately 1 year after completion of the training program.

Estimated Completion Date: March 1970

1.3.48 MICHIGAN STATE UNIVERSITY
EAST LANSING, MICH.

GRANT NO. 91–24–69–12

Doctoral Candidate: Nancy B. Tuma, Department of Sociology

Sponsor: Dr. Thomas L. Conner

Dissertation: Probability Model of Change of Employment of Mexican Americans

Objectives and Procedures: This study is developing a probability model to describe changes of employment (i.e., frequency of job changes, farm to industrial employment, or vice-versa) among male Mexican American heads of households. Job histories of 624 Mexican American migratory farmworkers collected under a Manpower Administration contract (see **1.1.24**) are being analyzed to ascertain the predictive value of such factors as socioeconomic mobility, geographic mobility, and frequency of migration.

Estimated Completion Date: September 1969

1.3.49 MICHIGAN STATE UNIVERSITY
EAST LANSING, MICH.

GRANT NO. 91–24–69–25

Doctoral Candidate: Jerry N. Judy, Department of Sociology

Sponsor: Grafton Trout

Dissertation: Occupational Specialization, Chain Migration, and the Assimilation of Mexican Americans into Michigan Communities

Objectives and Procedures: This study is examining the history of occupational adjustment of migratory Mexican American farmworkers who have settled in four Michigan towns, using data from an earlier study (see **1.1.24**), supplemented by interviews with (1) persons familiar with the historical patterns of Mexican American settlement in the communities, (2) employers, and (3) persons involved in helping newcomers find employment. The study explores the hypothesis that recent Mexican American settlers, especially those who came to join relatives in the same community, usually seek and find jobs in those occupations in which earlier Mexican American settlers have been employed.

Estimated Completion Date: December 1969

1.3.50 MICHIGAN STATE UNIVERSITY
EAST LANSING, MICH.

GRANT NO. 91–24–69–49

Doctoral Candidate: Charles A. Drake, Department of Sociology

Sponsor: Dr. Philip M. Marcus

Dissertation: Supervision, Technology, and Work Group Behavior

Objectives and Procedures: This study seeks to determine what style of supervision is most appropriate for work groups performing under different technologies. Specifically, it investigates correlations between two styles of supervision—authoritarian and group participative—and such dimensions of technology as differentiation of skills within the work group, extent of education required to perform assigned work tasks, the precision with which work load and performance can be measured, and repetitiveness of tasks. Then, the study attempts to measure the combined impact of supervisory style and technology on the following aspects of work group behavior: Absenteeism, turnover rates, grievances reported, and job performance. Data are being gathered through questionnaires from, interviews with, and records on work groups in research, manufacturing, and industrial relations within a large industrial corporation.

Estimated Completion Date: August 1970

1.3.51 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

GRANT NOS. 91–24–67–21
91–24–68–44

Doctoral Candidate: Dorothy M. Herberg, Department of Sociology

Sponsor: Dr. Louis A. Ferman

Dissertation: The Career Patterns of Female Social Workers

Objectives and Procedures: This study attempts to develop typologies of career patterns for women with professional social work training and to explain variations among these typologies. Comprehensive mail questionnaires were sent to 6,000 women between the ages of 40 and 60 who hold master's degrees in the field. The questionnaires requested information on family background, education, current socioeconomic status, marital status, professional practice, other employment experience, and career attitudes.

Estimated Completion Date: March 1970

1.3.52 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

GRANT NO. 91–24–68–07

Doctoral Candidate: Jeffry Piker, Department of Sociology

Sponsor: Dr. Louis A. Ferman

Dissertation: Community Organization, Race, and Entry Into the Work Force

Objectives and Procedures: This study investigates patterns of access to entry-level jobs and the effect of race, community organization, and other variables on such patterns. A theoretical framework is being developed to test appropriate hypotheses regarding the effects of community organization on jobseeking behavior and the effects of race on work force entry.

The analysis is based on data collected between 1962 and 1964 by the Chicago Youth Development project under a grant from the Ford Foundation. These data were drawn from a random sample of 1,260 boys aged 10 to 19 years, 300 mothers, and 200 community leaders in four southwest Chicago neighborhoods, each of which is a high-poverty, high-delinquency area, with an identity stemming from natural boundaries and subcultures. Qualitative knowledge and insights gained in firsthand investigation supplement the analysis of the data.

Estimated Completion Date: By June 1970

1.3.53 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

GRANT NO. 91–24–68–75

Doctoral Candidate: Larry B. Sawers, Department of Economics

Sponsor: Dr. Louis A. Ferman

Dissertation: Labor Force Participation Patterns of the Urban Poor

Objectives and Procedures: This study focuses on the decline in the labor force participation of Negroes, compared with other groups, since 1950. Participation patterns are being related to changes in aggregate labor demand and supply, taking into account several demographic variables which influence participation rates (race or ethnic group, age, sex, and education or training). The study is using a variety of data for a random sample of low-income tracts in standard metropolitan statistical areas of 500,000 or more.

Estimated Completion Date: By June 1970

1.3.54 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

GRANT NO. 91–24–69–13

Doctoral Candidate: David L. Featherman, Population Studies Center

Sponsor: Dr. Otis Dudley Duncan

Dissertation: Social and Psychological Factors in the Process of Occupational and Economic Achievement Among American Fathers

Objectives and Procedures: This study seeks to describe and analyze career achievements and socioeconomic status changes over the 1957–67 decade of 715 urban white fathers of two or more children, based on data compiled in the Princeton Fertility Study. Attention is being focused on the men's achievement, orientation, materialism, fertility, occupations, income, unemployment experience, job changes, migratory behavior, and religious and ethnic background.

Estimated Completion Date: September 1969

1.3.55 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

GRANT NO. 91-24-69-14

Doctoral Candidate: John S. Chase, Center for the Study of Higher Education

Sponsor: Dr. James L. Miller, Jr.

Dissertation: The Contribution of Education to State Economic Growth

Objectives and Procedures: This study examines the contribution of education—particularly higher education—to the economic growth of a State. Using Michigan as an example, the project seeks answers to the following: (1) What correlation exists between the State's economic growth and educational level of its labor force? (2) What are the recent migration patterns into and out of the State of the more highly educated? and (3) What variables determine the geographic dispersion of Michigan-educated college graduates? To supplement published data from government sources, graduates over a 15-year period of eight Michigan public colleges and universities are being surveyed.

Estimated Completion Date: By June 1970

1.3.56 UNIVERSITY OF MINNESOTA
MINNEAPOLIS, MINN.

GRANT NO. 91-25-69-29

Doctoral Candidate: C. Russell Hill, Department of Economics

Sponsor: Dr. N. J. Simler

Dissertation: Labor Force Participation of the Urban Poor

Objectives and Procedures: This study examines the relative importance of the following on labor force participation rates of the urban poor and nonpoor: (1) Economic factors, such as wage rates, skill level, total family income, and the family's asset and debt position; (2) demographic factors, particularly educational attainment and health; and (3) factors such as experiences in training programs which are thought to influence an individual's taste for work. Data are being used from the Office of Economic Opportunity's survey of 30,000 households in both 1966 and 1967, with emphasis on poor families—white and nonwhite —with married male heads who worked during the preceding year.

Estimated Completion Date: December 1969

1.3.57 NEW YORK UNIVERSITY
NEW YORK, N.Y.

GRANT NOS. 91-34-66-18
91-34-67-28

Doctoral Candidate: Warren Mintz, Department of Sociology

Sponsor: Dr. Sidney Aaronson

Dissertation: A Study of Variables Involved in the Successful Adaptation of Agricultural Migrant Families

Objectives and Procedures: This study examines the mechanisms by which successful migrant family units are organized. The investigator is acting as a participant-observer in order to collect data on intrafamily relationships and on the relation of the family to the social and economic communities in which it finds work.

Estimated Completion Date: By June 1970

1.3.58 NEW YORK UNIVERSITY
NEW YORK, N.Y.

GRANT NO. 91-34-69-23

Doctoral Candidate: Harold G. Kaufman, Department of Psychology

Sponsor: Dr. Raymond A. Katzell

Dissertation: Work Environment, Personal Characteristics, and Obsolescence of Engineers

Objectives and Procedures: This study explores the nature of technological obsolescence among engineers. It is developing measures of such obsolescence and relating these measures to one another, to the work environment, to the engineers' personal characteristics (such as flexibility and initiative), and to job performance. The sample, drawn from a large company with many technical specialties, consists of engineers tested for engineering knowledge when they were first hired in the mid-1950's. For the present study, a comparable achievement test is being given, and measures are being taken of these men's attitudes, work histories, and job performance.

Estimated Completion Date: December 1969

1.3.59 NORTHWESTERN UNIVERSITY
EVANSTON, ILL.

GRANT NO. 91–15–69–35

Doctoral Candidate: Robert B. Wallace, Department of Economics

Sponsor: Dr. Robert Eisner

Dissertation: The Benefits of Public High School Education in the United States

Objectives and Procedures: For students from different socioeconomic backgrounds, this study attempts to measure the increments in achievement and income that are associated with attending various high schools. The analysis seeks to isolate the influence of school, community, and home variables on changes in a student's achievement test scores between the ninth and 12th grades and to relate his school achievement to his earnings 5 years after graduation, taking account of post-high school training and motivational factors. These measures of the high school's contribution to the individual's achievement, and ultimately to his earnings, will quantify differences among groups of students and the schools themselves. Data are being drawn from Project TALENT (a cooperative effort of the U.S. Office of Education, the American Institutes for Research, and the University of Pittsburgh), under which longitudinal information on selected high schools and students has been collected since 1960.

Estimated Completion Date: August 1970

1.3.60 NORTHWESTERN UNIVERSITY
EVANSTON, ILL.

GRANT NO. 91–15–69–40

Doctoral Candidate: Ronald G. Ehrenberg, Department of Economics

Sponsor: Dr. George E. Delehanty

Dissertation: A Model of the Simultaneous Short-Run Employment Decision and the Trade-Off Between Overtime and Employment in United States Industries

Objectives and Procedures: This study tests the hypothesis that employers schedule overtime for employees instead of hiring additional workers primarily because employment costs (including fringe benefits and training) exceed overtime payments. The analysis —based on 1966 data from the Bureau of Labor Statistics for 4,000 manufacturing and nonmanufacturing firms—considers only regularly scheduled overtime.

Estimated Completion Date: March 1970

1.3.61 THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION
COLUMBUS, OHIO

GRANT NO. 91–37–66–40

Doctoral Candidate: Paul B. Miller, Department of Economics

Sponsor: Dr. Glenn W. Miller

Dissertation: An Analysis of Government Training Programs in Ohio

Objectives and Procedures: This study concerns the work experience of MDTA course graduates in Ohio. Records of employed and unemployed graduates are being analyzed to determine if important differences in their personal and work experiences affect their ability and willingness to adapt to the world of work and their methods of adapting.

Estimated Completion Date: By June 1970

1.3.62 PRINCETON UNIVERSITY
PRINCETON, N.J.

GRANT NO. 91–32–66–20

Doctoral Candidate: Stanley W. Huff, Department of Economics

Sponsor: Dr. Frederick H. Harbison

Dissertation: Hiring Practices, Hiring Standards, and Manpower Development Policies of Selected Employing Institutions in Labor Markets With Differing Rates of Unemployment

Objectives and Procedures: This study compares recruiting, hiring, and wage policies for selected occupations in high and low unemployment labor markets. Interviews are being conducted with personnel managers, employment service officials, guidance counselors, and union officials in adjacent Wheeling, W. Va., and Steubenville, Ohio-Weirton, W.Va.—the high and low unemployment areas, respectively.

Estimated Completion Date: By June 1970

1.3.63 PRINCETON UNIVERSITY
PRINCETON, N.J.

GRANT NO. 91–32–68–19

Doctoral Candidate: Paul Offner, Department of Economics

Sponsor: Dr. Albert Rees

Dissertation: Labor Force Behavior in the Poverty Areas

Objectives and Procedures: This study focuses on the approximately 5,000 urban poverty areas (the lowest fourth of the census tracts in the 100 largest standard metropolitan statistical areas ranked by income, education, skills, housing, and proportion of broken families). Using 1960 census data and more recent information from the Office of Economic Opportunity and the Census Bureau, three influences on the labor force behavior of poverty area residents are being examined: (1) Undertraining and underutilization, in comparison with the population of metropolitan areas as a whole; (2) changing national economic conditions; and (3) the shifting location of industry.

Estimated Completion Date: By June 1970

1.3.64 PRINCETON UNIVERSITY
PRINCETON, N.J.

GRANT NO. 91–32–69–66

Doctoral Candidate: James J. Heckman, Department of Economics

Sponsor: Dr. Albert Rees

Dissertation: Determinants of Household Labor Force Response to Income and Asset Changes

Objectives and Procedures: In order to predict the labor force behavior of married women by age, this project attempts to relate their labor force participation, by age and race, to: (1) The size and source of income changes in their households; (2) their families' assets and debts; and (3) changes in the level and composition of assets. Household data for the period 1960–65 compiled by the U.S. Department of Labor are being used.

Estimated Completion Date: June 1970

1.3.65 STANFORD UNIVERSITY
PALO ALTO, CALIF.

GRANT NOS. 91–05–66–24
91–05–67–30

Doctoral Candidate: Paul D. Gayer, Department of Economics

Sponsor: Dr. Melvin W. Reder

Dissertation: Manpower Effects of Cuban Immigrant Flows, 1959–66

Objectives and Procedures: This study examines the mechanisms by which the U.S. economy and the

Miami, Fla., job market have adjusted to the inflow of Cuban refugees. Local, State, and Federal efforts to cope with the problem are being assessed. A competitive model, constructed from emploment service and Cuban Refugee Center data, is being compared with actual market conditions in the Miami area.

Estimated Completion Date: December 1969

1.3.66 STANFORD UNIVERSITY
PALO ALTO, CALIF.

GRANT NOS. 91–05–68–56
91–05–69–55

Doctoral Candidate: Jay Siegel, Department of Economics

Sponsor: Dr. Julius Margolis

Dissertation: Intrametropolitan Migration of Minority Groups: Residential Change in Response to Occupational Opportunities

Objectives and Procedures: This study considers whether migration within a metropolitan area by minority group households is a function of change in distance traveled to the job and/or change in the type of housing desired. The study also examines whether nonwhite jobs are dispersing from the central business district. Data on nonwhites and families with Spanish surnames are being drawn from a 50,000-home interview survey conducted by the Bay Area Transportation Study Commission in 1965 and covering nine counties in the San Francisco area.

Estimated Completion Date: By June 1970

1.3.67 SYRACUSE UNIVERSITY
SYRACUSE, N.Y.

GRANT NO. 91–34–68–03

Doctoral Candidate: Bernard Daniel Rostker, Department of Economics

Sponsor: Dr. Jerry Miner

Dissertation: The Theory of Manpower Requirements and Occupational Retraining and the Determinants of MDTA Training Success

Objectives and Procedures: In this study, labor requirements concepts found in several theoretical production models are being applied to occupational retraining, and the results are being used as a basis for identifying and evaluating the elements of successful MDTA retraining programs. Program elements which are being examined as determinants of success include demographic characteristics and educational background of trainees; local environment (i.e., neighborhood characteristics as reported in the census tract and block reports); local employment conditions; characteristics of instructors; course content; and costs (i.e., method of instruction, the capital/student ratio, the student/teacher ratio, funds spent in various activities). The relative success of a program is being measured in terms of the proportion of enrollees who complete training, wage and employment differentials before and after training, and the internal efficiency of the program itself (i.e., the effective use of scarce resources to produce trained workers). Training and course records are being analyzed for 19 MDTA programs in the Syracuse, N.Y., area.

Estimated Completion Date: By June 1970

1.3.68 SYRACUSE UNIVERSITY
SYRACUSE, N.Y.

GRANT NO. 91–34–68–42

Doctoral Candidate: Alan B. Kirschenbaum, Department of Sociology

Sponsor: Dr. William Pooler

Dissertation: Family Migration Between Metropolitan Areas

Objectives and Procedures: This study examines the social and demographic characteristics of families moving between metropolitan areas. It focuses on occupational background as a determinant of migration and also relates migration to race, age, education, and family size. The study will provide a profile of migrant families by areas of destination and their size. The sample for the study consists of family units that moved between standard metropolitan statistical areas during the period 1955–60, as reported in the 1960 census.

Estimated Completion Date: By June 1970

1.3.69 SYRACUSE UNIVERSITY
SYRACUSE, N.Y.

GRANT NO. 91–34–69–26

Doctoral Candidate: John H. Florer, Department of Political Science

Sponsor: Dr. Nelson M. Blake

Dissertation: The National Effort To Acquire Federal Action on Equal Employment Opportunities for Women in the 1960's

Objectives and Procedures: This study is documenting and analyzing private efforts in the 1960's to spur Federal action against sex discrimination in employment. The nature of the drive for equal employment opportunities for women is being related to Federal policies and to Federal legislative, administrative, and judicial actions. The study is using data from official records and published materials, as well as interviews or correspondence with public figures who promoted various actions, with representatives of equal employment interest groups, and with Government officials involved in applications of the law.

Estimated Completion Date: December 1969

1.3.70 TEXAS TECHNOLOGICAL COLLEGE
LUBBOCK, TEX.

GRANT NO. 91–46–69–15

Doctoral Candidate: Richard C. Stapleton, School of Business Administration

Sponsor: Dr. Vincent P. Luchsinger

Dissertation: Manpower Migration Patterns in the South Plains Region of Texas

Objectives and Procedures: This study seeks to understand the decisions of rural youth on whether to attend college, what occupations to enter, and whether to migrate to urban areas. Information on occupations, income, and job satisfaction is being sought by questionnaires from approximately 90 percent (400 persons) of all 1954–63 graduates of high schools in four agricultural communities in the South Plains region of Texas. Responses will be interpreted in terms of the regional economy and agricultural environment. Spatial patterns of emigration will be established, and comparisons made between the youth who did and did not emigrate to urban areas.

Estimated Completion Date: By June 1970

1.3.71 TEXAS TECHNOLOGICAL COLLEGE
LUBBOCK, TEX.

GRANT NO. 91–46–69–21

Doctoral Candidate: Albert S. King, School of Business Administration

Sponsor: Dr. Carlton Whitehead

Dissertation: Managerial Relations With Disadvantaged Work Groups: Supervisory Expectations of the Underprivileged Worker

Objectives and Procedures: This study tests the hypothesis that supervisors' low expectations of disadvantaged workers have a direct, negative impact on the workers' performance. Supervisors of newly hired disadvantaged workers are being told that certain workers actually selected at random performed well on aptitude tests and can be expected to do well on the job. Supervisors are being interviewed about their ethnic backgrounds, their attitudes toward the workers at the beginning and the end of the experiment, and their evaluations of the selected workers. The entire group of workers is then being rated according to the firm's performance standards, and these ratings correlated with supervisors' expectations.

Estimated Completion Date: October 1969

1.3.72 THE UNIVERSITY OF TEXAS
AUSTIN, TEX.

GRANT NO. 91–46–68–24

Doctoral Candidate: John L. Iacobelli, Department of Economics

Sponsor: Dr. F. Ray Marshall

Dissertation: Training Programs of Private Industry in the Greater Cleveland Area

Objectives and Procedures: Seeking to determine the best way to coordinate Federal training programs with training by private industry, this study is gathering information about private employers' attitudes and opinions and their suggestions for improving training programs in the Greater Cleveland area. It is soliciting employers' ideas on the division of training responsibility among private industry, government, and the educational system and on ways of coordinating such training programs. Quantitative information on private training programs in Cleveland is being used to evaluate the present effectiveness of these programs and their potential for solving minority group unemployment in a metropolitan area.

Information is being sought through personal interviews with employers, trade school administrators and instructors, and State employment officials, as well as through questionnaires sent to employees in formal training programs, graduates of such programs, employees informally trained on the job, and trainees in a trade school program.

Estimated Completion Date: July 1969

1.3.73 TUFTS UNIVERSITY
MEDFORD, MASS.

GRANT NO. 91–23–69–37

Doctoral Candidate: Richard N. Harris, Department of Sociology

Sponsor: Dr. Edwin M. Schur

Dissertation: Recruits and Training Procedures within the Police Academy and Implications for Law Enforcement

Objectives and Procedures: The study analyzes the police academy as a mechanism for training law enforcers. It considers various influences on recruits' behavior and attitude formation, such as the academy's organization and orientation, the staff's attitudes, and the group's norms. The study also examines adaptation of training procedures because of the movement toward professionalism in law enforcement, civil disturbances, and perceived public hostility. Shortly before the end of a 3-month police training program in which the candidate is acting as a participant-observer, a questionnaire will be administered to the recruits. Resulting data will be supplemented by interviews with academy dropouts and graduates in their first months as rookies.

Estimated Completion Date: March 1970

1.3.74 TULANE UNIVERSITY
NEW ORLEANS, LA.

GRANT NO. 91–20–68–55

Doctoral Candidate: Thomas L. Turner, Department of Sociology

Sponsor: Dr. Leonard Reissman

Dissertation: Attitudes Comprising the "Culture of Poverty"

Objectives and Procedures: This study is testing the validity of the concept, "culture of poverty," by contrasting the existence of certain values, norms, and attitudes among the poor and nonpoor. It is measuring the effects of age, family structure, and race on individual adherence to the values, norms, and attitudes of the "culture of poverty." Emphasis is being placed on aspects of the "culture" which hinder the poor in achieving economic security when the opportunity is present. Interviews are being conducted in New Orleans with 125 persons from each of the following groups: Poor whites, poor Negroes, and whites and Negroes whose incomes are above the poverty level.

Estimated Completion Date: By June 1970

1.3.75 UTAH STATE UNIVERSITY
LOGAN, UTAH

GRANT NO. 91–47–68–52

Doctoral Candidate: Gary B. Hansen, Department of Economics

Sponsor: Dr. Felician F. Foltman, Cornell University

Dissertation: Britain's Industrial Training Act: A Case Study in the Development of Public Manpower Policy

Objectives and Procedures: This project explores the impact on Britain's manpower programs and policies of the 1964 Industrial Training Act, which created a national occupational training framework with a range of skill development systems. The objectives of the act were to promote economic growth and modernization in the face of acute shortages of skilled manpower during a period of full employment and increased competition in world markets for the nation's manufactured products. The study is analyzing those aspects of Britain's manpower programs that might be adapted to meet similar problems in the United States.

Data on the early experience under the 1964 act were analyzed by the researcher for another study (see **3.1.77**). For the present study, extensive interviews and followup interviews have been conducted with practitioners and policymakers in British government, industry, schools, professional and voluntary associations, and private manpower agencies.

Estimated Completion Date: By June 1970

1.3.76 WASHINGTON UNIVERSITY
ST. LOUIS, MO.

GRANT NO. 91–27–69–10

Doctoral Candidate: Kenneth Galchus, Department of Economics

Sponsor: Dr. Richard F. Muth

Dissertation: The Measurement of the Elasticity of Substitution of Nonwhite for White Labor

Objectives and Procedures: This project investigates the degree to which it is feasible to substitute nonwhite labor for white labor in selected occupations. It attempts to determine the relative importance of two reasons for inelasticity of substitution: (1) That nonwhites may have lower levels of skill, education, or other work-related qualities than their white counterparts; and (2) that other employees or customers may discriminate against nonwhites. Comparisons are being made among the elasticities of substitution established for each occupation. The analysis uses 1960 census data for male workers in approximately 20 occupations in 30 standard metropolitan statistical areas.

Estimated Completion Date: December 1969

1.3.77 WASHINGTON UNIVERSITY
ST. LOUIS, MO.

GRANT NO. 91–27–69–24

Doctoral Candidate: Marvin H. Kahn, Department of Economics

Sponsor: Dr. Edward Kalachek

Dissertation: Substitution in the Labor Market: A Nonseparable Approach

Objectives and Procedures: This study is concerned with the extent to which elasticity of substitution among capital and different types of labor (labor market inputs) can offset the inflationary effects of capital and labor shortages. Specifically, it investigates post-World War II changes in the elasticity of substitution with respect to workers in different occupations, age-sex groups, and levels of educational attainment. Based on the assumption that all labor market inputs interact with one another inseparably, the study tests the hypothesis that capital can act as either a substitute for or a complement to labor. The study measures the effects on elasticity of substitution of changes in technology, the composition of output, and labor force characteristics, using data from various government sources.

Estimated Completion Date: By June 1970

1.3.78 WASHINGTON UNIVERSITY
ST. LOUIS, MO.

GRANT NO. 91–27–69–38

Doctoral Candidate: Norbert W. Budde, Department of Economics

Sponsor: Dr. Edward Kalachek

Dissertation: Demand and Training for Dental Hygienists

Objectives and Procedures: This study attempts to determine the range of activities, within a dentist's practice, in which a hygienist can substitute for the dentist. The optimal mix of these activities is being determined by the relative cost of dentists' and hygienists' time, in terms of training costs and duration of career. Finally, a demand and supply curve for hygienists is being derived and compared with present training facilities.

Dentists who do and do not employ hygienists are being interviewed concerning the time they spend on various tasks which both they and hygienists can perform, and the total volume of services their practices provide. The demand estimate for hygienists is based on substitution possibilities and the value of the dentists' time in terms of the size of their practices. The supply estimate builds on the results of other studies and takes into account such factors as expected rate of return on investment in training, availability and cost of training, and present competition to enter training.

Estimated Completion Date: March 1970

1.3.79 WASHINGTON UNIVERSITY
ST. LOUIS, MO.

GRANT NO. 91–27–69–65

Doctoral Candidate: Lawrence Slifman, Department of Economics

Sponsor: Drs. Edward Kalachek and Murray L. Weidenbaum

Dissertation: Occupational Mobility of Disadvantaged Workers

Objectives and Procedures: This study seeks to identify the impact of changes in labor demand on the upward occupational mobility of low-income Negroes and whites and to pinpoint occupations where race and education impede mobility least. It attempts to answer the following questions: (1) For a given degree of labor market tightness, what is the likelihood of upward occupational mobility among these groups, and how does it differ for individuals by race, age, and education? (2) Does the likelihood of upward mobility for low-skilled workers increase as the labor market tightens in higher skilled occupations? and (3) For a given change in labor market conditions, what is the change in the relative flows of whites and Negroes between occupations? The study will use available data on 2,500 low-income families during the period 1964–67.

Estimated Completion Date: June 1970

1.3.80 UNIVERSITY OF WASHINGTON
SEATTLE, WASH.

GRANT NO. 91–51–68–54

Doctoral Candidate: James D. Gwartney, Department of Economics

Sponsor: Dr. Kenneth McCaffree

Dissertation: Earnings Differentials and Differences in the Occupational Structure of Employment Between White and Nonwhite Males in Major U.S. Cities

Objectives and Procedures: To measure employment discrimination due to race, as evidenced in payment of lower wages to nonwhites for comparable work (wage discrimination) and/or in preference for hiring whites (job opportunity discrimination), this study seeks answers to the following questions: (1) In what occupations does discrimination cause the largest differences between whites' and nonwhites' earnings and/or employment? (2) Is the evidence of employment discrimination greater in southern than northern cities? and (3) Does the evidence of discrimination increase with the percentage of a city's nonwhite population? Other demographic variables that affect earnings and job opportunities will be taken into account in 1950 and 1960 census data on white and nonwhite men in 25 major cities.

Estimated Completion Date: By June 1970

1.3.81 WAYNE STATE UNIVERSITY
DETROIT, MICH.

GRANT NOS. 91–24–66–14
91–24–67–26
91–24–68–53

Doctoral Candidate: Stig Ralstrom, Department of Industrial Education

Sponsor: Dr. G. Harold Silvius

Dissertation: Teaching Practices for Preventing Dropouts

Objectives and Procedures: This study attempts to identify and evaluate those teaching practices in industrial education which are associated with low dropout rates. Major sources of data are vocational and high school records, current research, and consultations with selected teachers.

Estimated Completion Date: July 1969

1.3.82 THE UNIVERSITY OF WISCONSIN
MADISON, WIS.

GRANT NOS. 91–53–66–10
91–53–67–16

Doctoral Candidate: Collette Moser, Department of Economics

Sponsor: Dr. Gerald G. Somers

Dissertation: An Evaluation of Area Skill Surveys as a Basis for Manpower Policies

Objectives and Procedures: This study examines the effectiveness of Area Skill Surveys and Training Needs Surveys in providing usable occupational projections. These surveys are conducted by State employment services in order to predict occupational needs for 2–5 years. Followup studies are being made of selected Area Skill Surveys to detemine the accuracy of their projections. Additional data are being gathered through interviews with employment service officials.

Estimated Completion Date: January 1970

1.3.83 THE UNIVERSITY OF WISCONSIN
MADISON, WIS.

GRANT NO. 91–53–66–26

Doctoral Candidate: Wilbur J. Smith, Department of Economics

Sponsor: Dr. Harold Groves

Dissertation: The Cost and Benefits of Unemployment, Retraining, and Relocation in an Economically Depressed Area: A Case Study of Five Counties in West Virginia

Objectives and Procedures: This study is assessing the costs and benefits of retraining the unemployed in terms of how well course offerings meet the needs of the local job market, increase occupational and geographic mobility, improve employment and earnings, and increase the working life of trainees. It is also determining the effect of certain retraining programs on the amount and kind of social welfare payments. The research utilizes data from interviews, social security files, and analyses of retraining and welfare programs.

Estimated Completion Date: By June 1970

1.3.84 THE UNIVERSITY OF WISCONSIN
MADISON, WIS.

GRANT NO. 91–53–66–27

Doctoral Candidate: Jack H. Snyder, Industrial Relations Research Institute

Sponsor: Dr. Gerald G. Somers

Dissertation: Personal and Behavioral Factors Affecting the Supply of the Self-Employed

Objectives and Procedures: This study attempts to uncover the personal and behavioral factors governing the supply of self-employed, to compare owner-managers with hired managers, and to forecast on the basis of personal factors the supply of owner-managers in retail and service industries. Data are being compiled by interviewing and testing a sample of owner-managers and a representative group of hired managers in Madison, Wis.

Estimated Completion Date: By June 1970

1.3.85 THE UNIVERSITY OF WISCONSIN
MADISON, WIS.

GRANT NO. 91–53–66–69

Doctoral Candidate: Walter Hubner, Industrial Relations Research Institute

Sponsor: Dr. Alan Filley

Dissertation: Individual Need Satisfaction in Work and Nonwork

Objectives and Procedures: This study explores blue-collar workers' motivations and the satisfaction they find in work (as opposed to leisure) and in specific jobs (at various skill levels and at different levels of technology). A forced-choice questionnaire is being administered to a sample of workers in jobs ranging from highly skilled to unskilled and from fully automated to artisan in level of technology.

Estimated Completion Date: By June 1970

1.3.86 THE UNIVERSITY OF WISCONSIN
MADISON, WIS.

GRANT NO. 91–53–67–17

Doctoral Candidate: Marilyn Joyce DePoy, Department of Economics

Sponsor: Dr. Gerald G. Somers

Dissertation: A Study of Women in the MDTA Vocational Training Program in the State of Wisconsin

Objectives and Procedures: This study compares female and male trainees in MDTA programs with respect to personal characteristics, type of job training, completion of training, and posttraining experiences in the labor market. Differences will be interpreted in terms of eligibility requirements for training and training allowances and the role of employment service personnel in referring applicants. A detailed, comparative profile of female and male trainees is being compiled from records of 8,500 Wisconsin trainees. These records and labor market data will be supplemented by questionnaires from employment service personnel and, possibly, from a sample of trainees.

Estimated Completion Date: February 1970

1.3.87 THE UNIVERSITY OF WISCONSIN
MADISON, WIS.

GRANT NO. 91–53–69–07

Doctoral Candidate: John S. Haines, Department of Economics

Sponsor: Dr. W. Lee Hansen

Dissertation: The Effects of Expansion of Technical Knowledge on Productivity

Objectives and Procedures: This study attempts to create a framework for analyzing the extent to which advancing technical knowledge simultaneously decreases the productivity (i.e., earnings) of those engineers whose knowledge is outmoded and increases productivity of those who obtain command of the new knowledge. Measures of the obsolescence of knowledge are being developed from analyses of professional literature, science and engineering curriculums, patent data, and the like. Analysis will then be made to measure the influence of the knowledge variable on earnings of different groups of engineers (by specialty, education, age, etc.).

Estimated Completion Date: February 1970

1.3.88 THE UNIVERSITY OF WISCONSIN
MADISON, WIS.

GRANT NO. 91–53–69–09

Doctoral Candidate: John W. Hambleton, Department of Economics

Sponsor: Dr. W. Lee Hansen

Dissertation: Determinants of Geographic Differences in the Supply of Physician Services

Objectives and Procedures: This study attempts to measure the influence of several variables underlying the present geographic distribution of physicians as a case study of the incentives which attract highly skilled service workers to depressed urban and rural areas. Specifically, it explores the following questions about the physician's choice of location: (1) What weight does he put on the absence of complementary services? (2) How broadly does he define his "wage"? (3) How is family income level or health insurance coverage related to a person's use of physician services? Data on these questions and on the distribution of doctors for the census tract areas in 50 major cities and for rural counties throughout the United States—both grouped by income level in the area—are being analyzed.

Estimated Completion Date: By June 1970

1.3.89 THE UNIVERSITY OF WISCONSIN
MADISON, WIS.

GRANT NO. 91–53–69–41

Doctoral Candidate: Andrew J. Winnick, Department of Economics

Sponsor: Dr. Glen G. Cain

Dissertation: The Characteristics, Education, and Earnings of Technicians and Other Semiprofessional Workers

Objectives and Procedures: For designers, draftsmen, surveyors, medical and dental technicians, electrical and electronic technicians, and engineering and physical science technicians, this study is relating education and training to earnings and examining the economic return on different combinations and amounts of training. The analysis takes into account variations in personal characteristics which may affect earnings. Data for the analysis are being drawn from the 1962 postcensal survey of scientific, professional, and technical manpower and the 1960 1/1,000 sample census.

Estimated Completion Date: April 1970

1.3.90 THE UNIVERSITY OF WISCONSIN
MADISON, WIS.

GRANT NO. 91–53–69–45

Doctoral Candidate: Richard S. Toikka, Department of Economics

Sponsor: Dr. Glen G. Cain

Dissertation: Supply Responses of the Unemployed

Objectives and Procedures: This study seeks to relate such labor supply decisions of the unemployed as adjustment of asking wage, willingness to change occupation or residence, intensity of jobseeking effort, and dropping out of the labor force, to the following: (1) Their demographic characteristics, occupation, and labor force experiences; (2) the probability of job placement for particular groups; and (3) wages received in new employment. The analysis is based on survey data gathered by government agencies and private researchers.

Estimated Completion Date: August 1970

1.3.91 YALE UNIVERSITY
NEW HAVEN, CONN.

GRANT NO. 91–07–67–38

Doctoral Candidate: Barbara Holtz Kehrer, Department of Economics

Sponsor: Dr. Mark W. Leiserson

Dissertation: Demand and Supply Under Conditions of Shortage: A Study of the Nursing Profession

Objectives and Procedures: This study evaluates the Nurse Training Act of 1964, which seeks to increase the supply of nurses by lowering the cost and extending the availability of a nursing education. The extent to which this approach alleviates shortages is being assessed.

The researcher is concentrating on hospital demand for registered nurses in Connecticut. A series of interviews is being held with the administrators of 33 short-term general hospitals in the State. Wage and employment data for all hospital employees are being provided by the Connecticut Hospital Association.

Estimated Completion Date: December 1969

1.3.92 YALE UNIVERSITY
NEW HAVEN, CONN.

GRANT NO. 91–07–68–59

Doctoral Candidate: Bruce R. McKellips, Department of Economics

Sponsor: Dr. Mark W. Leiserson

Dissertation: Negro Migration and the Urban Complex: Some Implications for Public Policy

Objectives and Procedures: This study is evaluating the structure and dynamics of Negro migration in order to suggest policies on migration to central cities. It uses data from the 1960 census on gross and net migration into and out of States and standard metropolitan statistical areas.

Estimated Completion Date: By June 1970

1.3.93 YALE UNIVERSITY
NEW HAVEN, CONN.

GRANT NO. 91–07–69–46

Doctoral Candidate: Donald D. Bowen, Department of Administrative Sciences

Sponsor: Dr. Douglas T. Hall

Dissertation: An Evaluation of Motivational Similarity in Work Groups

Objectives and Procedures: This study explores two possible sources of similar needs for achievement, affiliation, and power which have been discerned among members of work groups: (1) Selection of group members, formally by managers and informally by other group members; and (2) socialization through group interaction. The study also assesses the influence of similar needs on such aspects of group operation as productivity and job satisfaction of its members. Questionnaires are being given to members of 15–20 work groups, and interviews are being conducted with supervisors and selected employees.

Estimated Completion Date: February 1970

1.4 PROJECTS ACTIVE ON JUNE 30, 1969—Research Project Grants Under the MDTA[11]

1.4.01 ATLANTA UNIVERSITY
ATLANTA, GA.

GRANT NO. 91–11–69–33

Principal Staff: Dr. David E. Kidder, Center for Manpower Studies

Project Title: Negro and White Perceptions of Company Employment Policy in the South: Case Studies in Rural and Urban Nonfarm Sectors

Objectives and Procedures: This is the first phase of a planned three-part study of the racial structure of labor force migration from the South. The entire project will investigate possible relations between Negro and white workers' out-migration and their perceptions of nonfarm employment opportunities in the South, successful enforcement of the 1964 Civil Rights Act, and noneconomic factors in their decisions to migrate.

The present study attempts to contrast Negro and white workers' perceptions of the availability to them of nonfarm employment in urban and rural areas of the South. Random samples of employees from the 100 largest companies in Atlanta and from several new firms in rural Georgia and Alabama are receiving questionnaires covering the following: (1) The company's equal employment opportunities policy; (2) job classifications; (3) racial composition of the work force; and (4) recruitment and upgrading procedures. Analysis of workers' perceptions takes into account their occupations, rural or urban locations, and demographic characteristics.

Estimated Completion Date: January 1970

1.4.02 BOWDOIN COLLEGE
BRUNSWICK, MAINE

GRANT NO. 91–21–69–43[12]

Principal Staff: Dr. John C. Donovan, Department of Government and Legal Studies

Project Title: British Manpower Policy and the Process of Institutional Change

Objectives and Procedures: This study examines the relationship between the substance of recent British manpower policy and the policy actually effected through institutional and administrative arrangements. It focuses on the influence exerted on manpower policy by national economic policies, private groups, and key government officials and compares British and American experiences. British government officials, representatives of management and labor unions, and academic experts are being interviewed; manpower training centers and employment offices are being visited; and government documents are being examined.

Estimated Completion Date: April 1970

1.4.03 BOWLING GREEN STATE UNIVERSITY
BOWLING GREEN, OHIO

GRANT NOS. 91–37–66–71
91–37–67–39

Principal Staff: Dr. Robert M. Guion, Department of Psychology

Project Title: The Meaning of Work and Its Relation to the Development of the Motivation to Work

Objectives and Procedures: This study of young men leaving school (colleges, trade schools, and high schools) to enter engineering and factory jobs is attempting to find out what their concepts of work are, how these concepts develop on the job, and how they affect the men's motivation. Extensive preemployment tests are used to classify each new employee as "task oriented," "socially oriented," or "self-oriented," and coworkers' ratings are used to assess his motivation. The group with which he starts work is classified as "work oriented" or "not work oriented." For each classification, the relationship between concepts of work and motivation is to be analyzed.

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[11] Requests for information concerning these grants should be directed to the principal staff.

[12] This project is funded jointly with the Ford Foundation.

Estimated Completion Date: By June 1970

1.4.04 BUREAU OF SOCIAL SCIENCE RESEARCH, INC.

WASHINGTON, D.C.

GRANT NO. 91–09–69–31

Principal Staff: Dr. Albert D. Biderman

Project Title: Recent Second Career Patterns of Military Retirees

Objectives and Procedures: This study examines certain aspects of the labor force participation of men who have retired from the Armed Forces after a career of 20 or more years: (1) Their difficulty in recent years in finding good jobs; (2) their present employment status as related to age at retirement, present age, education, rank, and year of retirement; (3) impact of legislation barring dual compensation for retired military personnel employed by the Federal Government; and (4) their use of employment assistance under programs recently initiated by the Departments of Labor and Defense.

This study will supplement and update earlier analyses, including one sponsored by the Manpower Administration (see **3.1.07**). Data for the present study are being drawn from a 1966 Department of Defense survey of a 25-percent sample of retired military personnel.

Estimated Completion Date: By June 1970

1.4.05 UNIVERSITY OF CALIFORNIA, BERKELEY

BERKELEY, CALIF.

GRANT NO. 91–05–67–61

Principal Staff: Dr. Lloyd Ulman, Director, Institute of Industrial Relations

Project Title: A Study of Changing Skill Requirements in the Building Trades

Objectives and Procedures: This study analyzes changing labor requirements in the crafts, particularly carpentry, involved in the homebuilding industry. It is constructing data for various crafts on man-hours required per square foot of floor space in typical tract and nontract houses built in Alameda County (Calif.) between 1930 and 1965. The study will explore the usefulness of these data in developing projections of manpower demand in homebuilding. Information is being derived from county building permits, architects' records, National Association of Homebuilders' files, estimators' handbooks for the period under study, and discussions with persons in the homebuilding industry.

Estimated Completion Date: January 1970

1.4.06 COLUMBIA UNIVERSITY

NEW YORK, N.Y.

GRANT NO. 91–34–67–58

Principal Staff: Dr. Herbert Hyman, Chairman, Department of Sociology

Project Title: Occupational Choice and Its Determinants Among Totally Blind Individuals

Objectives and Procedures: As part of a larger study of the patterns of communication, perception, and social behavior among the blind, this study examines blindness as a barrier to gaining knowledge of environment, and consequently, to choosing a career. Patterns of occupational choice are being contrasted between blind Negroes and whites and between those blinded before the age of 15 years and those blinded later in life. The developmental processes underlying these patterns are being examined through a parallel study of totally blind children and their families.

The present analysis is based on the following groups drawn from the sample of the total study: 180 white and 90 Negro adults, totally blind, living in northern cities; and 80 white and 20 Negro children, totally blind, 10 to 15 years of age, living in New York City.

Indepth interviews have been held with the adults, and a sighted family member was also interviewed concerning the blind person's immediate and larger environment and how he had been socialized or resocialized. Parallel interviews were conducted with the children; their mothers were questioned about the patterns of childrearing followed with the blind child and with his siblings; and sighted siblings were interviewed whenever available regarding their own development within the family and their orientation toward the blind child. Computer analysis is being used to trace individual and aggregate patterns of learning.

Estimated Completion Date: December 1969

1.4.07 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NO. 91-34-68-26

Principal Staff: Dr. William J. Goode and Dr. Cynthia F. Epstein, Department of Sociology

Project Title: Social Factors Affecting Utilization and Mobilization of Trained Personnel in Elite Occupations

Objectives and Procedures: This study focuses on members of social groups and social categories (such as women and minority group members) whose participation in prestige occupations (such as law and scientific research) is effectively blocked by self-exclusionary practices and pressures from outside the economic sphere. Information from interviews, census data, and relevant literature is being analyzed to answer the following questions:

1. Which occupational environments are particularly conducive to the use of professionals whose social origins or attributes are not typically associated with the occupation?

2. What are the consequences for occupational mobility, achievement, and productivity of socioeconomic backgrounds that do not conform to the commonly accepted model?

3. What changes in social institutions would increase demands for the talents of professionals from social groups previously blocked from the elite occupations?

Estimated Completion Date: By June 1970

1.4.08 CORNELL UNIVERSITY
ITHACA, N.Y.

GRANT NO. 91-34-69-30 [13]

Principal Staff: J. Gormly Miller, New York State School of Industrial and Labor Relations

Project Title: Development of an Industrial Relations Information Service (IRIS)

Objectives and Procedures: This project is developing and bringing to a fully operational level a comprehensive information system in industrial relations to serve scholars and professionals in universities, private industry, government, and labor. Liaison is being sought with related information systems, such as the U.S. Office of Education's Educational Resources Information Center, the Smithsonian Institution's Science Information Exchange, and the Central Library and Documentation Branch of the International Labour Office in Geneva.

This project builds on the findings of a feasibility study partially supported by a Manpower Administration grant (see **2.3.06**). In addition, the present project continues earlier research in techniques of indexing and abstracting services and of packaging and delivering industrial relations information.

Estimated Completion Date: June 1970

1.4.09 UNIVERSITY OF HOUSTON
HOUSTON, TEX.

GRANT NO. 91-46-68-48

Principal Staff: Dr. Louis H. Stern, Department of Economics and Finance

Project Title: Relationship Between Unemployment and Commuting Within Geographical Areas

Objectives and Procedures: This pilot study is considering whether 15 regions delineated as standard metropolitan statistical areas (SMSA's) are actually adequate for labor market analyses. Using 1960 census data, it seeks to determine whether an SMSA's unemployment rate is an appropriate economic indicator for any of its geographic subdivisions by testing the hypothesis that commuting to jobs within the area generally equalizes unemployment rates among the residents of different geographic subdivisions who are in the labor force if allowance is made for differences in occupation, sex, and racial or ethnic group.

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[13] Most financial support for this study is being provided by industrial relations centers at 14 universities.

Estimated Completion Date: January 1970

1.4.10 INDIANA UNIVERSITY FOUNDATION BLOOMINGTON, IND.

GRANT NOS. 91-16-66-32
91-16-67-40

Principal Staff: Dr. C. L. Christenson and Dr. W. H. Andrews, Department of Economics and Division of Economic Research

Project Title: A Study of Labor Force Adaptation to Technical Change in the Coal Industry

Objectives and Procedures: This study analyzes changing skill requirements and adjustment problems incident to rapid technological development in the U.S. bituminous coal mining industry. The experience of the industry between 1956 and 1965 is being examined to determine how productivity and employment changes are related to such variables as geographic distribution of production, production in different types of mines, labor productivity, extent of total or partial unemployment, and degree of regional economic development in the areas involved. The adequacy of arrangements for retirement, transfer, and retraining of workers displaced during this period is being assessed.

Estimated Completion Date: By June 1970

1.4.11 MASSACHUSETTS INSTITUTE OF TECHNOLOGY CAMBRIDGE, MASS.

GRANT NO. 91-23-67-41

Principal Staff: Dr. David P. Taylor and Dr. Michael J. Piore, Sloan School of Management

Project Title: A Comparison and Evaluation of Government-Supported and Privately Financed Training Programs

Objectives and Procedures: This study compares several federally subsidized on-the-job training programs with privately financed programs in four occupational fields (tool and die makers, restaurant employees, offset printers, and fishermen) in the Boston area. Six kinds of comparisons are being made, on the basis of program records and information obtained in interviews with program directors, trainees, and employers: (1) Demographic, educational, and pretraining work backgrounds of trainees; (2) posttraining work histories of trainees, both completers and dropouts; (3) program content; (4) techniques of instruction; (5) cost of training; and (6) distribution of the costs and benefits of training among participants, employers, and consumers. The researchers are developing criteria for allocating training funds and for collecting data on training programs.

Estimated Completion Date: By June 1970

1.4.12 MASSACHUSETTS INSTITUTE OF TECHNOLOGY CAMBRIDGE, MASS.

GRANT NO. 91-23-69-34

Principal Staff: Dr. Jon M. Shepard, Industrial Relations Section, Sloan School of Management

Project Title: Technology, Division of Labor, and Alienation from Work

Objectives and Procedures: This study explores the effects of particular types of technological systems on office workers' attitudes toward their jobs. The researcher defines three groups of office workers, according to the "man-machine relationships" that characterize their jobs: (1) Skilled artisans—those who use no machines or who use machines as adjuncts to their tasks (e.g., clerks and secretaries with typewriters); (2) workers in mechanized production—those operating machines peripheral to the computer (e.g., keypunchers and card sorters); and (3) workers in automated production—those operating computer consoles. The study tests the hypothesis that alienation from their jobs will be greater for workers in mechanized production than for either of the other two groups.

Interviews are being conducted with 1,200 employees at five northeastern insurance companies and one large bank. The results of this study will be compared with the researcher's earlier examination of blue-collar workers in industrial situations (see **3.2.19**).

Estimated Completion Date: By June 1970

1.4.13 UNIVERSITY OF MASSACHUSETTS AMHERST, MASS.

GRANT NO. 91–23–66–55

Principal Staff: Dr. Everett S. Lee, Department of Sociology and Anthropology

Project Title: Spatial Mobility and Manpower Development

Objectives and Procedures: This study examines the implications for manpower development and training of migration to, from, and within the States of Pennsylvania and Mississippi. Census data are being used to determine the extent to which the two States are dependent upon manpower from other States, the extent to which the two States are developing manpower for other States, and the types of manpower migrating to and from the two States. Standard demographic techniques of analysis are being applied to the volume or rate of in- and out-migration for specific race-sex-education-age groups.

Estimated Completion Date: By June 1970

1.4.14 UNIVERSITY OF MASSACHUSETTS AMHERST, MASS.

GRANT NO. 91–23–68–27

Principal Staff: Solomon Barkin, Labor Relations and Research Center

Project Title: A Study of National Manpower Policies in OECD Countries

Objectives and Procedures: This study attempts to distill lessons for current manpower programs in the United States by analyzing the experience of the countries belonging to the Organisation for Economic Cooperation and Development (OECD) and the research generated by OECD. Considering the manpower field as an integrated system, the study covers the following subjects: Objectives; national economic and social problems; systems for determining priorities for their solutions; policymaking systems; research; statistics and data collection resources; administration of recruitment; development of the appropriate quality of manpower; stimulation of the demand for labor; organization and operation of the job market; systems of enterprise; and programs for optimum productivity of the work force.

The researcher is drawing on the resources and knowledge acquired during 5 years with the Manpower and Social Affairs Directorate of the OECD, supplemented by correspondence with officials in the OECD and member countries.

Estimated Completion Date: December 1969

1.4.15 UNIVERSITY OF MASSACHUSETTS AMHERST, MASS.

GRANT NO. 91–23–69–20

Principal Staff: Solomon Barkin, Labor Relations and Research Center

Project Title: Manpower Policy and Programs: Tools for Economic Policy—A Planning Project

Objectives and Procedures: This project explores the interrelationships between economic and manpower policy objectives, instruments, measures, and behavior, as developed in the Federal Government. A series of studies are being outlined in the following major areas: (1) Manpower aids to the promotion of economic objectives; (2) manpower aspects of the impact of major economic tools; (3) economic measures for advancing manpower objectives; and (4) economists' tools in the development of manpower programs.

The project will result in: (1) A report outlining the various aspects of the relationship between economic and manpower policy; and (2) a specific plan for a series of seminar meetings at which the subjects of highest priority would be discussed on the basis of policy-oriented papers to be prepared by subject-area specialists. In addition, an annotated bibliography is being compiled of current writings on the topics considered in the program.

Estimated Completion Date: January 1970

1.4.16 MICHIGAN STATE UNIVERSITY
EAST LANSING, MICH.

GRANT NO. 91–24–66–30

Principal Staff: Dr. Michael E. Borus, School of Labor and Industrial Relations

Project Title: Research To Demonstrate the Uses of Unemployment Insurance Wage Reports

Objectives and Procedures: This project seeks to demonstrate the potential value of individual wage reports as a source of information in the study of manpower problems. Three substudies of data from the wage reports are being made: (1) Workers' earnings and unemployment experience after retraining are being examined to supplement and check the validity of information derived from present retraining followups and to determine which groups profit most from retraining; (2) the costs and benefits of various vocational education programs are being compared; and (3) the accuracy of data obtained through personal interviews and mail questionnaires is being checked against parallel information secured from the wage reports and social security records.

Estimated Completion Date: June 1970

1.4.17 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

GRANT NO. 91–24–67–56

Principal Staff: Dr. Louis A. Ferman, Institute of Labor and Industrial Relations

Project Title: Study of the Correlates of Long-Term Unemployment

Objectives and Procedures: This study is concerned with the degree of influence exerted by age, education, literacy, and race on the prolongation of unemployment. Statistical techniques are being used to isolate these interlocking variables and measure their relative contribution to long-term unemployment; to the occupational and geographical mobility of the long-term unemployed; and to the willingness and capacity of these workers to seek retraining, as well as their capacity to score satisfactorily on vocational tests in order to qualify for a job or training program.

The researcher is using data from a 1962 study by the Michigan Employment Security Commission of 2,114 Detroit residents who had been unemployed 26 weeks or longer, and from 1964 and 1966 followup vocational tests, counseling, and interviews with subsamples of this group. Other demographic and ecological data associated with Detroit inner-city areas are being used to relate the characteristics of inner-city life to the employment patterns of residents.

Estimated Completion Date: By June 1970

1.4.18 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

GRANT NO. 91–24–68–41

Principal Staff: Dr. Martin Gold, Institute for Social Research

Project Title: An Agency's Effort to Improve the Future of Adolescent Boys in the Inner City

Objectives and Procedures: This study is assessing the impact on adolescent boys of a 1961–65 experimental program of the Chicago Boys Club which sought to combat juvenile delinquency in two inner-city target areas. In addition to the Club's traditional building-centered recreational activities, the program provided academic and vocational counseling and job placement and worked with community institutions to increase vocational education, apprenticeship, jobs, and recreational opportunities.

The data for this analysis were collected during the program. Two control areas with matching demographic characteristics were constructed from surrounding census tracts. Variables relevant to the condition of the populations and goals of the program were measured at the beginning and end of the program. Data were collected through interviews with representative samples of the boys in each area who were and were not participating in the program, their mothers, community leaders, and personnel throughout the Chicago Boys Club organization. Further material was gathered from police, court, and school records on the behavior and performance of the boys in the study, and the boys themselves provided information on their aspirations, perception of opportunities, current plans and efforts to prepare themselves for future employment, and school attitudes and performance.

Estimated Completion Date: By June 1970

1.4.19 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

GRANT NO. 91–24–69–47[14]

Principal Staff: Dr. Sandra S. Tangri, Institute for Social Research

Project Title: Effects of Background, Personality, and College Experience on Women's Post-Graduate Employment

Objectives and Procedures: This project follows up the researcher's dissertation, which associated background factors, personality characteristics, and college experiences of 200 college women with commitments to traditionally masculine professions. Using interviews and mail questionnaires, the present study attempts to answer the following questions about these same women 3 years after graduation:

1. What factors associated with aspirations predict perseverance in the chosen field?
2. What factors affect occupational commitment?
3. For what kind of woman does early marriage make career pursuits more likely?
4. What role do husbands play in these outcomes?

Estimated Completion Date: August 1970

1.4.20 THE UNIVERSITY OF MICHIGAN— WAYNE STATE UNIVERSITY
ANN ARBOR, MICH.

GRANT NO. 91–24–66–03

Principal Staff: Dr. Louis A. Ferman, Institute of Labor and Industrial Relations

Project Title: Community Organization and the Mobilization of Resources for Manpower Development Programs

Objectives and Procedures: This study attempts to relate the economic and social structure of a community to its receptivity to Federal development programs, in order to predict local response to such programs. Data are being collected from the records of local and State agencies in all U.S. communities with populations over 25,000. Degree of mobilization of local resources is being used as a measure of community receptivity.

Estimated Completion Date: By June 1970

1.4.21 NORTH TEXAS STATE UNIVERSITY
DENTON, TEX.

GRANT NO. 91–46–68–38

Principal Staff: Dr. Sam B. Barton, Department of Economics

Project Title: Measurement of Workmen's Compensation Underwriter Performance as a Factor in Lost Time From Industrial Injuries, and Related Indices

Objectives and Procedures: This study is developing and testing measures of variations in the efficiency and adequacy with which workmen's compensation insurance underwriters handle injury claims. The researcher anticipates that such indexes, by stimulating better handling of industrial injury claims, will contribute significantly to reducing the man-hours lost to industrial injuries. A sample of 5,000 to 6,000 cases drawn from the 65,000 to 70,000 claims processed during the year September 1966–August 1967 by the Texas Industrial Accident Board provides a significant cross-section of cases handled by the 20 major insurance companies operating in Texas. Data for analysis include industry, occupation, description of accident, medical report, nature of injury, extent of disability, hospitalization, weekly wage, weekly benefits, type of settlement, issues in dispute, disposition of case, and time lapse between the stages of claim processing.

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[14] Formerly Grant No. 91–24–69–04.

Estimated Completion Date: November 1969

1.4.22 UNIVERSITY OF OREGON
EUGENE, OREG.

GRANT NO. 91–39–66–38

Principal Staff: Dr. Donald A. Watson, Bureau of Business and Economic Research

Project Title: An Input-Output Model for Use in Manpower Projections for a State

Objectives and Procedures: This project is designing a system for collecting and analyzing data for use in constructing income and product accounts for a State. An input-output flow model and a workable model for making short-term projections of population, labor force, and industrial employment are being developed, using Oregon as the example. Data on the rates of technological change in various industries are being used to project the size of occupational groups in order that plans for vocational education can be made. Existing analytical models and data, especially projections of industry growth made by the University's Bureau of Business and Economic Research and projections of population and labor force made by the Oregon State Board of Census, are being revised and integrated into the development of the model.

Estimated Completion Date: By June 1970

1.4.23 PURDUE RESEARCH FOUNDATION
LAFAYETTE, IND.

GRANT NO. 91–16–68–36

Principal Staff: Dr. William K. LeBold, Engineering Administration

Project Title: A Study of Professional Job Satisfaction Dimensions and Their Correlates

Objectives and Procedures: This study is identifying the dimensions of engineers' and scientists' job satisfaction and measuring the way they relate to individual work history, educational background, work environment, professional activities, productivity, and job rewards. The project is using data from two questionnaire surveys involving nearly 7,000 engineers and scientists: (1) A 1964 study of a national sample of practicing engineers; and (2) a 1965 survey of Purdue University graduates with degrees in engineering, mathematics, and the physical sciences.

Estimated Completion Date: By June 1970

1.4.24 UNIVERSITY OF ROCHESTER
ROCHESTER, N.Y.

GRANT NOS. 91–34–66–48
91–34–67–53

Principal Staff: Dr. Dean Harper, Department of Sociology

Project Title: The Relationship of Migrant Workers' Attitudes and Behavior to Their Work Environment

Objectives and Procedures: This project examines different elements in the attitudes and aspirations of migratory farmworkers and relates this to their work experiences and to the migrant camp environment. Data from questionnaires administered to 141 migrants and 16 taped interviews are being examined for recurring themes and issues in the lives of migrant farmworkers.

Estimated Completion Date: By June 1970

1.4.25 RUTGERS—THE STATE UNIVERSITY
NEW BRUNSWICK, N.J.

GRANT NO. 91–32–68–74

Principal Staff: Dr. Jackson Toby and Leon R. Jansyn, Department of Sociology

Project Title: The Prospects for Success of Ex-Offenders as Small Business Proprietors

Objectives and Procedures: This project examines the social and economic relationships of the ex-offender who manages a small business enterprise. It explores the attractiveness of self-employment to the ex-offender and its value in overcoming problems of resocialization through interviews with 12 former offenders who succeeded in their own business enterprises and with 12 who failed. The interviews focus on ex-offenders' inability to accept supervision, need to avoid dependency, educational deficiencies, and other relevant variables. Although the study's findings are intended for use in establishing a guidance program for ex-offenders who wish to become self-employed, they should be applicable to disadvantaged entrepreneurs in general.

Estimated Completion Date: By June 1970

1.4.26 SAN DIEGO STATE COLLEGE
SAN DIEGO, CALIF.

GRANT NO. 91-05-68-32

Principal Staff: Dr. Oscar J. Kaplan, Department of Psychology

Project Title: A Critical Review of Current Programs for Training and Placement of Unemployed Middle-Aged and Older Workers in San Diego County, Calif.

Objectives and Procedures: This project is identifying deficiencies in programs for the employment of persons aged 45 and over in San Diego County and designing a program for increasing the hiring of these persons. Interviews are being conducted with key San Diego employers, employment service personnel, union officials, educators, and certain public officials. In addition, information is being gathered on older applicants currently seeking work through the San Diego office of the California Department of Employment and on past employment experiences of this age group.

Estimated Completion Date: By June 1970

1.4.27 UNIVERSITY OF SANTA CLARA
SANTA CLARA, CALIF.

GRANT NO. 91-05-68-72

Principal Staff: Thomas M. Martinez, Department of Sociology

Project Title: Past and Present Counseling and Placement Procedures in Private Employment Agencies—An Empirical Study

Objectives and Procedures: This study is analyzing the histoy of private employment agencies in the United States and their present counseling and placement techniques, with emphasis on the treatment of minority applicants. The impact of these techniques on applicants' self-images and career patterns is also being explored. In addition, data are being gathered on how the agencies recruit job applicants, what psychological devices they use in counseling different applicants, and whether and how the agencies cater to employers who wish to discriminate in hiring.

Compilation of agency history is based on literature review and interviews with National Employment Association leaders. Data on current practices are being gathered from interviews with agency owners and through observation at selected private agencies in the San Francisco Bay area.

Estimated Completion Date: October 1969

1.4.28 STANFORD UNIVERSITY
PALO ALTO, CALIF.

GRANT NOS. 91-05-66-53
91-05-68-34

Principal Staff: Dr. Melvin W. Reder, Department of Economics

Project Title: International Differences in Unemployment Rates of New Entrants to the Labor Force

Objectives and Procedures: This project is examining how a number of Western European countries consistently maintain appreciably lower rates of unemployment than the United States. International and regional differences in unemployment rates for recent labor force entrants are being related to differences in relevant economic structures and institutions. The analysis focuses on finding out how much of the overall differences in unemployment rates is due to lower (unemployment) rates for young people and recent rural-urban migrants and how much is due to various other causes. The study explores implications of the findings for public policy.

Estimated Completion Date: By June 1970

1.4.29 UNIVERSITY OF UTAH
SALT LAKE CITY, UTAH

GRANT NO. 91–47–69–64

Principal Staff: Dr. Garth L. Mangum, Human Resources Institute

Project Title: Tracing the Development of a Statewide Automatic Data Processing Employment Security System

Objectives and Procedures: As a guide for instituting computerized systems to match men and jobs, this project is tracing the introduction by the Utah Department of Employment Security of an automatic data processing system to handle managerial, unemployment insurance, and placement functions on a statewide basis. Attention is being given to the plans made, difficulties encountered, solutions found, and problems still to be solved in this pilot project.

Interviews are being conducted with involved Federal and State officials and employees of the computer company. In addition, the applications of a sample of persons seeking jobs through the employment service are being followed through the system.

Estimated Completion Date: June 1970

1.4.30 VANDERBILT UNIVERSITY
NASHVILLE, TENN.

GRANT NO. 91–45–67–19

Principal Staff: Dr. T. Aldrich Finegan, School of Economics

Project Title: The Economics of Labor Force Participation

Objectives and Procedures: This grant supports the final phase of a study of labor force participation rates of various population groups in the United States. The study as a whole is attempting to identify and explain the economic determinants of the various rates and to assess the policy implications of the patterns of participation and their determinants.

The effects of wage rates, unemployment rates, and supply and demand conditions are being assessed primarily from intercity regressions for three census years—1960, 1950, and 1940. Time series data on participation, unemployment, and other economic indicators are being examined to gain further insight into the cyclical sensitivity of labor force participation rates and to depict recent trends. Census data are being used to determine the effects of personal and family characteristics on participation decisions. The entire study will be published independently in book form.

Estimated Completion Date: By June 1970

1.4.31 WAYNE STATE UNIVERSITY
DETROIT, MICH.

GRANT NO. 91–24–68–29

Principal Staff: Dr. Robert A. Mendelsohn, Department of Psychology

Project Title: The Personality and Attitudinal Characteristics of Career and Homemaking Oriented Women

Objectives and Procedures: This investigation of personality characteristics, conceptions of masculine and feminine roles, and bases of self-esteem is an attempt to explain why so few of the women who work have jobs commensurate with their capabilities. A sample of 1,500 women and 500 men who graduated from Wayne State University are being given a personality test and asked to answer a questionnaire concerning their marital status and work experience. The analysis is attempting to establish differences between those women who are actively engaged in careers and those who are predominantly or exclusively homemakers and between these two groups and the men.

Estimated Completion Date: December 1969

1.4.32 WEST VIRGINIA UNIVERSITY
MORGANTOWN, W. VA.

GRANT NO. 91–52–68–10

Principal Staff: Dr. John D. Photiadis, Appalachian Center

Project Title: Sociopsychological Determinants of Migration and Adjustment of West Virginians in Cleveland

Objectives and Procedures: This study is obtaining information from 400 West Virginians who migrated to the Cleveland ghetto and subsequently moved to other areas of the city, for comparison with similar data from two other studies—one by the Appalachian Center and one by the Bureau of Social Science Research, Inc. (see **1.1.03**). Questions used in the earlier surveys are being asked in the present study, to permit comparisons of the migrants living outside the Cleveland ghetto with: (1) Migrants still living in the ghetto; (2) those who have returned from Cleveland to West Virginia; and (3) those of the same age and education who never left West Virginia. Occupational skills and personal, social, and psychological factors are being analyzed as determinants of the decision to migrate, adjustment in the city, and the decision by some to return to Appalachia.

Estimated Completion Date: By June 1970

1.4.33 UNIVERSITY OF WISCONSIN
MADISON, WIS.

GRANT NO. 91–53–68–33

Principal Staff: Dr. Jack Barbash, Department of Economics

Project Title: Labor Movement Participation in National Manpower Programs of Selected Countries of Western Europe; Implications for U.S. Government-Labor Relationships

Objectives and Procedures: This study considers the problem of how a democratic society actively involves an autonomous labor movement, with shortrun, sectional interests, in formulating and accomplishing longrun, nationally oriented manpower objectives. Inferences for U.S. policy are being drawn from an analysis of experience in the United Kingdom, West Germany, Austria, Sweden, Denmark, the Netherlands, and possibly Israel—all of which have developed well-established relationships between their labor movements and public manpower programs. Effects of these relationships are being assessed in terms of the special interests of the labor movement and of the relative success of public policies in each country. Interviews are being held in each country with union, management, and government administrators concerned with manpower policies. Union decisionmaking activities are being observed and operating documents examined.

Estimated Completion Date: February 1970

1.4.34 UNIVERSITY OF WISCONSIN
MADISON, WIS.

GRANT NO. 91–53–69–03

Principal Staff: Dr. David Chaplin, Department of Sociology

Project Title: Analysis of Private Household Employment in the United States From 1900 to 1966—An Exploratory Project

Objectives and Procedures: To suggest desirable and feasible reforms in the working conditions of domestics, this study is analyzing or reassessing all available data on private household employment from 1900 to 1966. The following questions are being considered: (1) Whether private household employment among racial and ethnic minorities has been increasing or decreasing, and how such a change relates to the general decrease in total participation in this occupation; (2) whether minority group participation is a function of local labor supply or demand conditions; and (3) whether domestic work serves as a stepping stone to lower middle-class positions.

The researcher has already completed an analysis of data from the 1960 census and the 1/1,000 sample census, and from a special 1965 Current Population Survey ordered by the Institute for Research on Poverty at the University of Wisconsin. The present study intends to analyze all other available data, with particular emphasis on Department of Labor surveys.

Estimated Completion Date: December 1969

1.4.35 YALE UNIVERSITY
NEW HAVEN, CONN.

GRANT NO. 91–07–69–48

Principal Staff: Dr. Robert S. Goldfarb, Department of Economics

Project Title: Absenteeism, Information and Recruitment in a Local Labor Market

Objectives and Procedures: This study seeks information on the policies and characteristics of a firm that affect its ability to attract and retain workers, with special attention to absenteeism as an indicator of job dissatisfaction and a major cause of turnover. A number of local labor recruitment issues are being examined, including: (1) What methods of information dissemination are most effective in enticing people to apply for employment; (2) how quit rates vary among workers, by skill level and seniority; and (3) how wage differentials among firms influence recruitment.

Data are being collected from a small sample of New Haven firms on quit rates, absenteeism, number of employment applications on file (these first variables classified by worker characteristics), recruitment and training expenditures, promotion and training policies, representative skill requirements, and location (whether accessible to concentrations of entry-level workers).

Estimated Completion Date: June 1970

1.5 PROJECTS ACTIVE ON JUNE 30, 1969—Research Contracts Under the Economic Opportunity Act (EOA) and the Social Security Act (SSA) [15]

The Economic Opportunity Act of 1964 and the Social Security Act, as amended in 1967, authorize studies to improve the overall effectiveness of several manpower programs.[16] Following are brief explanations of the programs on which research in this section is based.

CONCENTRATED EMPLOYMENT PROGRAM

Each CEP covers a clearly defined geographic area, usually an urban slum neighborhood or an impoverished rural area. The CEP is a coordinating mechanism designed to combine individual manpower programs (such as those listed below and standard MDTA training projects) into a comprehensive system of services and to concentrate the impact of these programs in the area. The CEP provides training and supportive services to disadvantaged persons so they can obtain steady, decently paid employment.

JOB OPPORTUNITIES IN THE BUSINESS SECTOR PROGRAM

Under leadership of the National Alliance of Businessmen, the JOBS Program enlists private industry in employing and training the hard-core unemployed in the Nation's 131 largest cities. The Department of Labor repays employers for the extra costs of the intensive training and supportive services required to employ and retain the hard-core unemployed.

NEIGHBORHOOD YOUTH CORPS

The NYC program has had three separate components for youth from low-income families: (1) An in-school program designed to help them stay in school by providing financial assistance through work, coupled with counseling and, when necessary, related remedial education and vocational training; (2) an out-of-school program intended to increase the employability of unemployed youth by providing the work experience, counseling, remedial education, and training that will enable them to return to school or will lead to further training and/or full-time employment; and (3) a summer program designed to encourage high school students and dropouts, through financial assistance from jobs, to return to school in the fall. Standards for admission to the program and the services provided are currently undergoing review and are to be revised.

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[15] Requests for information concerning these contracts should be directed to the principal staff.

[16] For details see GUIDELINES FOR SUBMISSION OF RESEARCH PROPOSALS—Research or Evaluation Contracts (section 4.1).

NEW CAREERS PROGRAM

Through on-the-job and classroom training, this program prepares disadvantaged adults for paraprofessional jobs in public and private nonprofit agencies in such critically undermanned fields as health, education, welfare, neighborhood redevelopment, and public safety.

WORK INCENTIVE PROGRAM

The WIN Program seeks ultimately to restore to economic independence all employable persons 16 years of age and over in families receiving Aid to Families with Dependent Children (AFDC). Referrals by welfare agencies to WIN manpower services proceed under three priorities: (1) Suitable jobs, on-the-job training, and/or supportive services are provided for persons identified as job ready; (2) work orientation, basic education, skill training, and work experience are provided for persons who can be made job ready; and (3) for the rest, whose potential for training and regular employment is reassessed every 3 months, special work projects are arranged by agreements with public or private nonprofit agencies. To provide an incentive for work, no deduction is made from welfare benefits for specified amounts of earnings or training allowances.

1.5.01 THE BROOKINGS INSTITUTION
WASHINGTON, D.C.

CONTRACT NO. 51–09–69–02

Principal Staff: Dr. Leonard H. Goodwin

Project Title: The Work Orientations of Welfare Recipients Participating in and Eligible for the Work Incentive Program (WIN)

Objectives and Procedures: This study seeks to identify differences in work orientation among welfare recipients and between them and regularly employed workers as a guide to more effective programs for helping welfare dependents to become economically independent. The differences are to be investigated in interviews with four groups to learn: (1) Their goals in life and work; (2) how they expect to attain these goals; (3) their attitudes toward work; and (4) their plans in regard to work. The first group—a national sample of 500 WIN participants—is being interviewed by counselors at six urban WIN projects. Home interviews are being held with the other three groups—an "experimental" group of 500 WIN participants in Baltimore, Md.; a "control" group of 2,250 welfare recipients in the Baltimore area who are eligible for, but not participating in, the WIN Program because of a lack of training vacancies; and 500 Baltimore families consisting of a regularly employed father, a mother in the home, and at least one child between the ages of 16 and 18. In addition, data are being obtained on the work and/or training performance of the experimental group to permit assessment of the changes in work orientations that accompany participation in the WIN Program.

Status of Project: Completion is scheduled for June 1970.

1.5.02 BUREAU OF SOCIAL SCIENCE RESEARCH, INC.
WASHINGTON, D.C.

CONTRACT NO. 41–7–007–09

Principal Staff: Dr. Leonard H. Goodman

Project Title: The Economic Needs of Neighborhood Youth Corps Enrollees

Objectives and Procedures: This research analyzed the economic needs of young people enrolled in in-school and out-of-school Neighborhood Youth Corps projects by relating expenditure patterns to unfilled needs. It also measured the extent to which these needs were being satisfied through the NYC program and explored the adequacy of current NYC policies regarding employment and remuneration of enrollees in relation to the goals of the program.

The sample for this study, 2,019 NYC enrollees in both rural and urban locations, was representative of the national NYC enrollment in June 1967. The enrollees, and a comparison group of 518 eligible youth not enrolled, were interviewed for basic information on income, expenditures, financial contributions to the family, and personal budgeting habits. Information on school-related expenses and the respondents' socio-economic environment was verified in interviews with school and project personnel.

Status of Project: Completion is scheduled for August 1969.

Highlights of Preliminary Findings: The researchers found that enrollees allocate their income responsibly. The largest single expenditure was either for housing, utilities and food, or a contribution to the family. The purchase of clothes was second. Relatively small sums were spent on recreation or luxuries. Among in-school enrollees, fairly large amounts went to meet education expenses; the ordinary costs of attending school were sizable in relation to family income and graduation expenses increased cost significantly. The researcher speculated that some of the out-of-school youth might not have dropped out had they been better able to meet these expenses.

In the needs revealed by the data, "a better place to live" considerably outweighed all others, particularly among out-of-school subjects. Clothing ranked second, followed by medical and educational needs among the in-school youth, and by medical and personal care needs among the out-of-school respondents. Four out of 10 respondents indicated that they should see a physician or dentist. Of these, over two-thirds planned such visits soon. Approximately 5 percent of the total sample admitted postponing these visits for financial reasons. Recreational needs, for the sample as a whole, outweighed those for food, but the reverse was true for the out-of-school group.

1.5.03 BUREAU OF SOCIAL SCIENCE RESEARCH, INC.
WASHINGTON, D.C.

CONTRACT NO. 51–09–69–03

Principal Staff: Dr. Leonard H. Goodman

Project Title: Employment Contexts and Disadvantaged Workers

Objectives and Procedures: This pilot study investigates the processes by which employers absorb into their work force AFDC recipients who complete the WIN Program, the attitudes of the persons concerned, and systematic variations among work settings. Topics to be examined are: (1) The norms and expectations which regulate the employee role (attendance, personal relationships, productivity, etc.); (2) the application of such norms to the disadvantaged and other workers; (3) employers' special provisions to facilitate absorption of WIN clients; (4) channels of employer-employee communication; (5) changes in employers' and supervisors' attitudes toward the personal, social, cultural, and work characteristics of employees in general and WIN clients in particular; (6) employers' evaluations of the job performance of WIN clients; and (7) employers' views of the problems of absorbing WIN clients into their work forces.

Data are being obtained in 30 establishments in three cities. In each establishment, interviews are being conducted with four or five managers, foremen, union representatives, and personnel officers, and with at least 10 WIN clients currently employed and coworkers in comparable jobs.

Status of Project: Completion is scheduled for February 1970.

1.5.04 CASE WESTERN RESERVE UNIVERSITY
CLEVELAND, OHIO

CONTRACT NO. 41-7-002-37

Principal Staff: Dr. Frank Friedlander and Dr. Herman Medow, Department of Psychology; Dr. Marvin Rosenberg, School of Applied Social Sciences

Project Title: Impact and Effectiveness of the Comprehensive Manpower Project of Cleveland (AIM)

Objectives and Procedures: This study of the Cleveland Concentrated Employment Program, which was undertaken shortly after the program was launched in June 1967, has gathered information on: (1) The relative changes in self-concepts, motivation, and occupational status of CEP participants; (2) the functions and activities of CEP project staff members; and (3) the attitudes of employers and coworkers toward hiring and working with CEP participants. In addition, comparisons have been made with groups of unemployed and underemployed persons outside the CEP. Data have been collected through questionnaires, interviews, and observations by the researchers.

Status of Project: Completion is scheduled for November 1969.

Highlights of Preliminary Findings: The researchers found that the participants sought support and saw personal counseling as the most desirable service provided by the CEP. Thus, it would seem that as much or more emphasis is needed on coaching and counseling as on the other components, such as recruitment and placement.

Other preliminary data indicated that companies expect to get "trained" manpower from the CEP, and the researchers considered the primary function of the CEP to be the placement of the hard-core unemployed, without emphasis on skill training. Employers seem hesitant to modify their policies and procedures in order to create new positions or facilitate the work adjustment of the CEP participants. According to the researchers, the continued participation of employers in the program in Cleveland calls for changes in either their attitudes or the services provided by the CEP, or both.

1.5.05 CASE WESTERN RESERVE UNIVERSITY
CLEVELAND, OHIO

CONTRACT NO. 51-37-69-11

Principal Staff: Dr. Marvin Rosenberg, School of Applied Social Sciences

Project Title: Decisionmaking in the WIN Program

Objectives and Procedures: This project is one of three feasibility studies sponsored by the Manpower Administration (see also **1.5.06** and **1.5.15**) to explore the nature and effects of decisions by which women receiving Aid to Families with Dependent Children are enrolled in the Work Incentive Program (WIN). Since appropriate decisions are vital, the three investigations are seeking ways of strengthening the decisionmaking process vis a vis the development of policy, selection of job opportunities, and counseling of potential WIN participants, especially as these relate to the training of WIN staff.

This study examines WIN decisionmaking in Cuyahoga County, Ohio. (See **1.5.06** for a description of the entire project.)

Status of Project: Completion is scheduled for June 1970.

1.5.06 UNIVERSITY OF CHICAGO
CHICAGO, ILL.

CONTRACT NO. 51-15-69-08

Principal Staff: Dr. William J. Reid, School of Social Service Administration

Project Title: Decisionmaking in the WIN Program

Objectives and Procedures: This project is one of three feasibility studies sponsored by the Manpower Administration (see also **1.5.05** and **1.5.15**) to explore the nature and effects of decisions by which women receiving Aid to Families with Dependent Children are enrolled in the Work Incentive Program (WIN). Since appropriate decisions are vital, the three investigations are seeking ways of strengthening the decisionmaking process vis a vis the development of policy, selection of job opportunities, and counseling of potential WIN participants, especially as these relate to the training of WIN staff.

Under the leadership of the University of Chicago, investigators working on the three studies are developing coordinated plans to assure comparability. The University of Chicago is studying the WIN Program in Cook County, Ill.; the University of Michigan, in Wayne County, Mich.; and Case Western Reserve University, in Cuyahoga County, Ohio.

In each study, interviews are being conducted with: (1) Approximately 75 women enrolled in WIN programs in the county about their attitudes and perceptions at the time of referral to WIN, the time of placement, and after placement; (2) a sample of referring caseworkers about the circumstances leading to their referrals, their assessment of the client's motivation for accepting the reasons for referral, and their role in the process; and (3) selected members of the WIN team about the circumstances prompting them to place the client in a particular program. In addition, the researchers are investigating regional, political, social, and administrative circumstances and characteristics that may affect decisionmaking processes in the county. Finally, they are examining the formal social service training and backgrounds of the social workers involved.

Status of Project: Completion is scheduled for July 1970

1.5.07 CORNELL UNIVERSITY
ITHACA, N.Y.

CONTRACT NO. 41–9–003–34

Principal Staff: Dr. Paul L. Gaurnier and Dr. William Fisher, School of Hotel Administration

Project Title: Career Ladders and Manpower Development for Non-Management Personnel in the Food Service Industry

Objectives and Procedures: The aim of this exploratory study is to improve career opportunities in the food service industry, where acute manpower shortages persist. A model career system for the industry is being designed to attract the disadvantaged and hard-core unemployed by structuring ladders for horizontal and vertical advancement. This system encompasses all nonmanagerial positions involved directly in food preparation (excluding chefs), distribution, food serving, and related services.

Initially, the researchers are attempting to assess existing patterns of occupational mobility and the structure and requirements of existing jobs—education, skills, and physical demands—in restaurants, cafeterias, motels, and institutional feeding firms. Case studies are being developed from interviews with officials and current and former employees of about 20 companies in five large cities. Additional information is being provided by the National Restaurant Association, the Hotel and Restaurant Employees and Bartender's International Union (AFL-CIO), and other interested groups. Data to be collected include the firm's training and education programs, work force turnover, promotional ladders, attitudes of employees toward jobs in the industry and their views on job prestige and satisfaction, working conditions, advancement potential, and their suggestions for job improvement.

Status of Project: Completion is scheduled for June 1970.

1.5.08 CORNELL UNIVERSITY
ITHACA, N.Y.

CONTRACT NO. 51–34–69–07

Principal Staff: Dr. Harold Feldman, Department of Child Development and Family Relationships

Project Title: A Study of the Effects on the Family Due to Employment of the Welfare Mother

Objectives and Procedures: This study investigates the consequences of a welfare mother's entering employment on the operation of her home, the care of her children, her use of community resources, and her self-perception. A sample of 1,200 families (in a city of less than 100,000) is being selected to permit comparisons between families in otherwise similar circumstances where: (1) The husband is or is not in the home; (2) the mother is or is not employed; and (3) the family has or has not left the welfare rolls.

Each family is being interviewed twice, 6 months apart, and intensive case studies are to be made of a sample of persons who leave jobs or welfare or otherwise change their status in the interim. In addition, information is being obtained on community facilities for transportation, child care, education, recreation, counseling, and health care.

Status of Project: Completion is scheduled for December 1970.

1.5.09 EDUCATIONAL TESTING SERVICE
PRINCETON, N.J.

CONTRACT NO. 41–9–005–32

Principal Staff: Dr. Norman E. Freeberg and Franklin R. Evens

Project Title: Development of Assessment Measures for Counseling Neighborhood Youth Corps Enrollees

Objectives and Procedures: This three-phrase study seeks to refine the content and define the capability of paper-and-pencil assessment measures, developed in a feasibility study by the researcher, for use as a counseling, guidance, and placement instrument in the Neighborhood Youth Corps. The measures identify such characteristics of NYC enrollees as vocational and occupational plans, aspirations, job knowledge, and interest; attitudes toward self, authority, and social values; and job-related reasoning skills.

In phase I of the project, the researcher is revising present items in the measures, developing additional items, and establishing criteria that reflect the degree of enrollees' success. In phase II, the researcher will measure the characteristics of enrollees' performance after they have completed the NYC program and validate the measures with a followup sample. In phase III, a normative data sample will be collected and a guidance system developed.

Status of Project: Completion is scheduled for August 1970.

1.5.10 FORDHAM UNIVERSITY
BRONX, N.Y.

CONTRACT NO. 41–7–010–34

Principal Staff: Dr. Mary G. Powers, Gerald M. Shattuck, and Dr. Charles Elliot, Department of Sociology and Anthropology

Project Title: The Job Supervisor's Role in Neighborhood Youth Corps Programs for Out-of-School Youth

Objectives and Procedures: This study examines the role of the Neighborhood Youth Corps job supervisor, who is usually a regular employee of the NYC sponsor (such as a municipal agency, the public library system, or a public hospital) and in close contact with the out-of-school NYC enrollee. The study seeks demographic and social information on job supervisors and compares their conception and performance of their jobs with the expectations of the NYC and the sponsoring agencies, with the aim of providing data to assist in the recruitment, training, and direction of job supervisors. The study design was developed through observation of NYC out-of-school job supervision at different types of jobsites in New York City, and data were gathered from interviews with job supervisors, enrollees, and NYC staff.

Status of Project: Completion is scheduled for November 1969.

1.5.11 THE GEORGE WASHINGTON UNIVERSITY
WASHINGTON, D.C.

CONTRACT NO. 41–7–004–09

Principal Staff: Dr. Regis H. Walther, Social Research Group

Project Title: A Study of the Effectiveness of Selected Out-of-School Neighborhood Youth Corps Programs, Phase III

Objectives and Procedures: Building on the work completed in an earlier study sponsored by the Manpower Administration (see **3.1.28**), this project aims to compare the effectiveness of selected out-of-school Neighborhood Youth Corps projects (in Cincinnati, Ohio; Durham, N.C.; East St. Louis, Ill.; and St. Louis, Mo.) in facilitating enrollees' adjustment to the world of work and to the community environment.

Six study components are underway: (1) A second round of interviews with the 1965 NYC enrollees described in the earlier study; (2) the Prospective Study—interviews with subjects as they enrolled in the NYC during late 1966 and 1967, and followup on their activities in the NYC program; (3) the Termination Study—interviews with a sample of NYC enrollees who dropped out of the program; (4) the Clerical Co-op Study—an analysis of a specialized skill-training program in Cincinnati for women; (5) the Work-Relevant Attitude Study—development of scales to measure work attitudes of NYC enrollees, so that they can be classified according to their needs and the services required; and (6) the Accelerated Learning Experiment—analysis of an experimental remedial education program being administered in three cities.

Status of Project: All of the studies are scheduled for completion by March 1970.

Highlights of Preliminary Findings: Both the earlier study and the Prospective Study mentioned above indicated that the NYC is reaching seriously disadvantaged youth with major employability problems. Enrollees gave generally good reports on the helpfulness of work supervisors and counselors and on the usefulness of the program, particularly those features that increased their employability. Negro women gave the program the highest ratings and stayed in the program the longest period. White men reacted oppositely. Male enrollees were assigned most frequently to cleaning, maintenance, and unskilled labor positions, and female enrollees to clerical and professional aid positions.

The Clerical Co-op Study indicated that a formal skill-training program can achieve far more employment among trainees than typical NYC work-experience programs. Significantly more of the participants in the co-op program than of a control group of youth of similar age, sex, race, and education achieved a good adjustment to the world of work. Within the co-op group, older girls and girls who had gone further in school were more successful in employment.

1.5.12 THE GEORGE WASHINGTON UNIVERSITY
WASHINGTON, D.C.

CONTRACT NO. 41–9–001–09

Principal Staff: Dr. Regis Walther, Social Research Group

Project Title: A Study of Negro Male High School Dropouts Who Are Not Reached by Federal Work-Training Programs (NYC)

Objectives and Procedures: This study explores why Negro male high school dropouts have failed to participate in Federal work-training programs, particularly the Neighborhood Youth Corps, so that improvements may be made in the programs' accessibility and responsiveness to such youth. The study also seeks knowledge of the dropouts' alternative postschool activities, including participation in other training programs, military service, employment, and unemployment. A random sample of approximately 400 youth who dropped out of school in the 1966–67 academic year and have never enrolled in Federal work-training programs is being interviewed in two cities.

Status of Project: Completion is scheduled for November 1969.

1.5.13 MICHIGAN STATE UNIVERSITY
EAST LANSING, MICH.

CONTRACT NO. 51–24–69–09

Principal Staff: Dr. Philip M. Marcus, Department of Sociology

Project Title: Undergraduate Social Work Education and the Needs of the WIN Program

Objectives and Procedures: To enable schools of social work to make a greater contribution to the solution of manpower problems and, especially, the Work Incentive Program (WIN), this study is investigating differences between the professional skills needed in the WIN Program and those supplied in undergraduate social work programs. If analysis of the data indicates that it is feasible to modify courses and curriculums so that graduates will be better trained for work in government programs for the disadvantaged and if schools of social work are receptive to such changes, a subsequent project could develop, initiate, and evaluate such modifications.

Information is being obtained by mail questionnaire from graduates of Michigan State University with a B.A. in social work and by interviews with key members of selected WIN teams in Michigan, supplemented by questionnaires to professional members of the teams.

Status of Project: Completion is scheduled for September 1970.

1.5.14 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

CONTRACT NO. 41–8–002–24

Principal Staff: Dr. Robert L. Kahn and Dr. Robert P. Quinn, Survey Research Center

Project Title: Integrating the Chronically Unemployed into the Work Role

Objectives and Procedures: This study analyzes the experience of a major automobile manufacturer in recruiting chronically unemployed individuals from the inner city and preparing them, through training and counseling, for regular employment in the factory. The study investigates the institutional and personal influences on turnover among these workers and regular employees and the changes in attitudes that appear to be linked with employment and/or training.

Data are being obtained from the workers and from company personnel participating in the program for the periods before and during training and/or employment and, in instances of turnover, after termination. In addition, the researchers are observing the processes and problems of performing an educational-social service function within a profit-oriented organization.

Status of Project: Completion is scheduled for October 1969.

1.5.15 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

CONTRACT NO. 51–24–69–10

Principal Staff: Dr. Charles D. Garvin, School of Social Work

Project Title: Decisionmaking in the WIN Program

Objectives and Procedures: This project is one of three feasibility studies sponsored by the Manpower Administration (see also **1.5.05** and **1.5.06**) to explore the nature and effects of decisions by which women receiving Aid to Families with Dependent Children are enrolled in the Work Incentive Program (WIN). Since appropriate decisions are vital, the three investigations are seeking ways of strengthening the decisionmaking process vis a vis the development of policy, selection of job opportunities, and counseling of potential WIN participants, especially as these relate to the training of WIN staff.

This study examines WIN decisionmaking in Wayne County, Mich. (See **1.5.06** for a description of the entire project.)

Status of Project: Completion is scheduled for June 1970.

1.5.16 THE UNIVERSITY OF MICHIGAN—WAYNE STATE UNIVERSITY
ANN ARBOR, MICH.

CONTRACT NO. 51–24–69–05

Principal Staff: Dr. Louis A. Ferman, Institute of Labor and Industrial Relations

Project Title: Welfare Careers and Low-Wage Employment

Objectives and Procedures: This study seeks information on the nature and extent of low-wage employment, especially among welfare recipients, as a guide to measures that could prevent workers in such jobs from alternating between employment and welfare or becoming long-term welfare dependents. On the basis of 125 case studies of welfare recipients and the working poor, an interview schedule covering personal characteristics, labor market experiences, mobility patterns, and participation in manpower programs is being developed and tested. This schedule will be used to interview 500 persons who have received welfare continuously for at least 3 years, 500 persons who have alternated between work and welfare during the same 3-year period, and 250 low-wage workers not receiving welfare.

Status of Project: Completion is scheduled for January 1971.

1.5.17 UNIVERSITY OF MINNESOTA
MINNEAPOLIS, MINN.

CONTRACT NO. 41-7-008-25

Principal Staff: Dr. Richard E. Sykes, Social Science Program

Project Title: A Pilot Study on Observational Measurement of Behavioral Factors Associated With Increased Employability of Out-of-School Neighborhood Youth Corps Enrollees

Objectives and Procedures: This study is testing the hypothesis, developed in a recent study by the researcher for the Office of Economic Opportunity, that tools for predicting the employability of enrollees in the Neighborhood Youth Corps can be developed from measures of behaviors signifying readiness for regular employment and upward job mobility. It is also testing the usefulness of observational measurement and of MIDCARS (Minnesota Interaction Data Coding and Reduction System)—an instrument newly developed by the researcher—as methods of observing work contexts, enrollees' work roles, and interaction between enrollees, supervisors, and others. All out-of-school NYC enrollees assigned to urban projects in Minnesota during the study period are being observed in seven 1-hour periods from the first through the 16th week of their enrollment. They are also being tested for intelligence, reading ability, and reinforcement needs.

Status of Project: Completion is scheduled for August 1969.

Highlights of Preliminary Findings: Enrollees were often supervised by adult coworkers rather than their formally designated supervisors. This absence of interaction with the formally designated supervisor at the jobsite may account for another preliminary finding which bears on enrollees' reinforcement needs: praise for appropriate behavior and criticism of inappropriate employability behavior were rarely observed.

1.5.18 UNIVERSITY OF MINNESOTA
MINNEAPOLIS, MINN.

CONTRACT NO. 41-8-003-25

Principal Staff: R. Frank Falk, Department of Sociology

Project Title: Education and Job Success in a New Careers Program

Objectives and Procedures: This study investigates the relationships among a number of social-psychological variables and background characteristics of enrollees in the Minneapolis New Careers Program and analyzes the relationship of those variables to a series of outcome variables such as job and educational performance. The social-psychological variables include: Work satisfaction; the individual's self-concept and self-regard; and his educational ability, desires, satisfaction, and satisfactoriness.

Data are being collected by questionnaires and interviews with all 207 enrollees. Extensive efforts are being made to follow up on program dropouts.

Status of Project: Completion is scheduled for October 1969.

Highlights of Preliminary Findings: Reports are being prepared on the problems of the dropout, the professionalization of the New Careers enrollee, and his job interests and satisfactions. The report on the dropout finds that he is more likely to be single, male, nonwhite, in his twenties rather than his thirties, with fewer children, and to have been unemployed or employed in unskilled jobs prior to entering the program. Personal reasons, such as illness, family problems, problems with the law, lack of interest in the work assignment, and irrelevant course requirements, are the principal reasons enrollees leave the program.

1.5.19 NATIONAL LEAGUE OF CITIES
WASHINGTON, D.C.

CONTRACT NO. 41-8-001-09

Principal Staff: Lawrence A. Williams

Project Title: Expanding Career Employment Opportunities in Municipal Government for the Disadvantaged

Objectives and Procedures: In this project, case studies were made of programs in six cities which provide entry jobs in municipal government that could lead to career employment for disadvantaged persons. The six cities were Dayton, Detroit, El Paso, New York, San Francisco, and Washington, D.C. Information was obtained through personal interviews with municipal program officials, trade unionists, and disadvantaged persons employed in the programs.

Status of Project: Completion is scheduled for November 1969.

Highlights of Preliminary Findings: Tentative findings available from this study in June 1969 indicate that:

1. The New Careers programs in the six cities were so limited in scope that they had little significant impact in alleviating unemployment among residents of deprived urban neighborhoods.

2. Participants' reactions to the programs were positive. Their hopes and ambitions were raised, and most of them felt they had an opportunity to play a meaningful role in society.

3. Various public and private agencies were used to provide supportive services including legal aid, family counseling, and child care. The latter was most highly valued by participants.

4. Limiting New Careers jobs to the "human services" fields can adversely affect New Careers as an antipoverty program and as a mechanism for meeting critical manpower needs. For example, substantial numbers of jobs, many with career ladders, in public works, water treatment, and automotive maintenance are excluded under a "human services" job creation approach.

5. The most difficult job of planners is to shape the new promotion ladders which are an inherent part of the New Careers design.

The preliminary report has been used by policy and planning personnel in the Department of Labor to help structure its new program of public employment for disadvantaged persons in various cities throughout the country.

1.5.20 STATE UNIVERSITY OF NEW YORK, BUFFALO

BUFFALO, N.Y.

CONTRACT NO. 41–9–002–34

Principal Staff: Dr. John E. Drotning, Dr. David B. Lipsky, and Myron D. Fottler, Department of Industrial Relations

Project Title: Jobs, Education, and Training: Research of a Project Combining On-the-Job and Literacy Training for the Disadvantaged, Phase II

Objectives and Procedures: This study implements the research developed in a Manpower Administration feasibility study (see **2.4.03**) on interaction among participants in Project Jobs, Education, and Training (JET), sponsored by the Opportunities Development Corporation. Nearly 1,000 interviews are being conducted with employers, first-line supervisors, union leaders, and trainees in firms participating in the JET on-the-job training program and their counterparts in firms not participating in the JET program.

Employers and union leaders are being asked about their attitudes toward participation in manpower programs, particularly the Job Opportunities in the Business Sector (JOBS) Program, and what revisions in the program would attract them. Supervisors are being asked about their attitudes on supervision of hard-core employees, their problems, and proposed solutions. JET trainees are being asked about their feelings toward the program, coworkers, supervisors, their jobs, and utilization of their training. Finally, workers in nonparticipating firms are being interviewed about their attitudes toward working with the hard-core and their knowledge and feelings about manpower programs and the types of jobs for which the hard-core unemployed should be trained.

Interviews have been completed with the 115 employers participating in JET, 115 nonparticipating employers matched for size and industry, and 50 union leaders. The sample of 275 trainees has been selected, and the trainee interview schedules are being revised according to a pretest.

Status of Project: Completion of the study is scheduled for November 1969.

1.5.21 NEW YORK UNIVERSITY

NEW YORK, N.Y.

CONTRACT NO. 41–8–006–34

Principal Staff: Dr. Raymond A. Katzell, Dr. A. K. Korman, and Dr. R. B. Ewen, Department of Psychology

Project Title: The Supervision of Workers from Different Ethnic Backgrounds

Objectives and Procedures: This project seeks to provide information on whether there are differences in the perceptions and evaluations of the characteristics of jobs and supervisors among workers from different ethnic backgrounds which affect their work adjustment and performance. An attempt is being made to suggest methods of supervision that are likely to prove effective with different groups of workers.

Hypotheses on differing perceptions and evaluations have been developed in preliminary interviews with a small number of workers. Based on these hypotheses, a questionnaire has been constructed for administration to about 1,000 white- and blue-collar workers.

Status of Project: Completion is scheduled for November 1969.

1.5.22 NORTH STAR RESEARCH AND DEVELOPMENT INSTITUTE

MINNEAPOLIS, MINN.

CONTRACT NO. 41–7–006–25

Principal Staff: Dr. Guy H. Miles

Project Title: Optimizing the Benefits of Neighborhood Youth Corps Projects for Rural Youth

Objectives and Procedures: This two-phase project seeks to provide guidelines for developing an effective Neighborhood Youth Corps program in rural areas. First, it defined the problems confronting rural youth in making the transition into work and developed hypotheses about the determinants of success and the ways in which the NYC could contribute to success. In the second phase, these hypotheses were tested and the implications of the data for NYC programs are being analyzed.

For phase I, all relevant studies were reviewed and interviews were conducted in rural areas in four Midwestern States with community leaders, NYC sponsors, and youth who were and were not enrolled in NYC programs. Information was also collected in Minneapolis-St. Paul and Des Moines—to which many of the rural youth in the four States migrate—from employment service officials and personnel managers, leaders of labor unions and social groups, policemen, and welfare workers. For phase II, information on rural NYC programs was obtained in interviews with NYC sponsors.

Status of Project: Reports on phase I have been completed (see **3.1.91, 3.4.04,** and **3.4.05**), and the report on phase II is scheduled for submission in August 1969.

Highlights of Preliminary Findings: The first phase of the study found that most rural youth leave the community as soon as they finish high school, either to seek work or continue their education, and few ever return to live in the area. Rural youth were described as being socially, as well as geographically, isolated and lacking opportunities to gain job experience in an industrial setting. In fact, the rural NYC programs in the four States studied were essentially in-school programs, because few youth drop out of school and the communities cannot provide appropriate worksites for out-of-school projects. Hence, the researchers suggest that rural NYC projects can be effective only if they help to prepare rural youth for urban occupations and urban living.

1.5.23 NORTH STAR RESEARCH AND DEVELOPMENT INSTITUTE

MINNEAPOLIS, MINN.

CONTRACT NO. 51–25–69–06

Principal Staff: Dr. Guy H. Miles and David Thompson

Project Title: Characteristics of the AFDC Population That Affect the Outcomes of WIN

Objectives and Procedures: This study investigates: (1) Differences in attitudes, behavior, perceptions, value systems, and related characteristics between the woman dependent on Aid to Families with Dependent Children (AFDC) for more than 5 years and the one who finds a job and leaves AFDC; (2) effects of long-term dependency on the welfare recipient's family; (3) changes over time in the long-term welfare recipient's perception of the benefit system; (4)

relationships between family stability and economic self-sufficiency of the household's head; (5) effects of the Work Incentive Program (WIN) on the participant's personality, family relationships, value system, attitudes, motivation, and economic status; and (6) relationships between the attainment of WIN goals and such factors as availability and quality of jobs, participant's health, and relevance of training.

Interview instruments are being developed to identify the critical differences in characteristics between short- and long-term AFDC recipients. The results are being validated against data for a matched group of low-income persons who have never been on welfare. Three interviews (at 6-month intervals) will then be conducted with women who participate in the WIN Program to determine whether the experience produces significant changes in employment status and the critical characteristics.

Status of Project: Completion is scheduled for December 1970.

1.5.24 NORTHEASTERN UNIVERSITY
BOSTON, MASS.

CONTRACT NO. 41–9–004–23

Principal Staff: Dr. Morris A. Horowitz and Dr. Harold M. Goldstein, Department of Economics

Project Title: Restructuring Paramedical Occupations

Objectives and Procedures: This study, following up a pilot study by the same researchers (see **2.3.10**), seeks to develop and test techniques for easing the shortage of skilled paramedical personnel in the health services and, in the process, providing to disadvantaged persons more job opportunities with the potential for upward mobility. With the cooperation of a hospital in the Boston area, the researchers are analyzing the duties and responsibilities of the various paramedical occupations to develop appropriate hiring standards and recommend changes in work assignments and hiring standards to improve use of personnel and the quantity and quality of patient care. They are also studying the effects of implementing the recommended changes and analyzing any barriers that may be encountered in doing so.

Status of Project: Completion is scheduled for October 1969.

1.5.25 THE PENNSYLVANIA STATE UNIVERSITY
UNIVERSITY PARK, PA.

CONTRACT NO. 41–8–004–40

Principal Staff: Dr. Morgan V. Lewis, Institute for Research on Human Resources

Project Title: Factors Influencing the Retention of Participants in a Concentrated Employment Program

Objectives and Procedures: This project seeks to ascertain what qualities in the individual and what factors in a Concentrated Employment Program hinder or block his use of CEP training and supportive services. Interviews are being conducted with: (1) A group of persons who expressed interest in the CEP when contacted by the recruiter but who never reported; (2) all unsuccessful CEP participants who either withdrew from or were terminated by the CEP; and (3) a matched sample of successful participants who remained in the CEP or were placed in jobs. Information is being obtained on the individual's social and economic characteristics, his attitudes toward self and society, and his experiences in the CEP.

Status of Project: Completion is scheduled for October 1969.

Highlights of Preliminary Findings: Preliminary examination of the data suggests to the researchers that the stereotype of hard-core unemployed individuals may not be typical. Modal groups, perhaps one-quarter to one-third of the sample of individuals who were contacted but not enrolled, may be women and in the 40-to-50 age bracket. Analysis of the data is oriented toward use in planning positive vocational direction in CEP counseling components and job development activities. The researchers have already suggested policies and plans for establishing indigenous workers as training and/or research project employees. These recommendations may have significant implications for the kinds of training opportunities provided under the Public Service Careers Program and the fulfillment of obligations, in programs under the Economic Opportunity Act, to employ local residents to the maximum extent.

1.5.26 UNIVERSITY OF PENNSYLVANIA
PHILADELPHIA, PA.

CONTRACT NO. 51–40–69–01

Principal Staff: Dr. Samuel Z. Klausner, Department of Sociology

Project Title: The Work Incentive Program: Making Adults Economically Independent

Objectives and Procedures: This project seeks basic information on the effects of participation in the Work Incentive Program on the process of adult socialization so that the program may be fully responsive to welfare recipients' needs. It also assesses the program's impact on the participants' labor market activity.

Three hundred AFDC recipients, selected from a city's welfare rolls, are being referred to the local manpower agency, which will place them in a suitable WIN project; another 300, who are eligible for such referrals but for whom no suitable training vacancy is currently available, are acting as a control group. Interviews are being conducted with all 600 to learn their characteristics, employability, motivation for employment, aspiration for promotion, attitudes toward working in particular situations, reactions to monetary remuneration, and cultural style which may affect employability.

Status of Project: Completion is scheduled for November 1970.

1.5.27 STATEN ISLAND MENTAL HEALTH SOCIETY, INC.
STATEN ISLAND, N.Y.

CONTRACT NO. 41–7–009–34

Principal Staff: Dr. Clyde E. Sullivan and Dr. Wallace Mandell

Project Title: Transition Between "Work Experience" and Work

Objectives and Procedures: This study examines the degree to which common perceptions of the demands and benefits of work are shared by enrollees in the Neighborhood Youth Corps, their work supervisors, and the employers to whom they ultimately apply for a job, to see if differences impede the enrollees' transition to work. It also investigates the extent to which participation in the NYC program of work experience changes the enrollees' job-related perceptions. Perceptions concerning four sets of work demands—skill and education requirements, behavior requirements, relations with other employees, and relations with supervisors—and the type and amount of employee benefits are being studied. Information on these subjects has been obtained from four groups connected with nine out-of-school NYC projects in New York City: (1) Male enrollees in their first 3 months of enrollment; (2) male enrollees during their last 3 months of enrollment; (3) NYC work supervisors of the latter group of youth; and (4) employers who hired or interviewed enrollees from the latter group.

Status of Project: Completion is scheduled for October 1969.

1.5.28 THE UNIVERSITY OF WISCONSIN
MILWAUKEE, WIS.

CONTRACT NO. 51–53–69–12

Principal Staff: Dr. Milton J. Huber, Center for Consumer Affairs

Project Title: The Relationship of Over-Indebtedness and Garnishments to Employability Among Milwaukee WIN Families

Objectives and Procedures: This pilot study explores the operational problems and the effects of making loans to participants in the Work Incentive Program (WIN) to remove the threat of garnishment. Major questions are whether financial assistance to remove the threat of garnishment will: (1) Decrease the dropout rate among WIN participants; (2) encourage employers to hire WIN trainees with previous garnishment problems; (3) increase job stability among WIN-trained employees; and (4) reduce their absenteeism.

Three groups of WIN participants in Milwaukee (a total of at least 75) are being interviewed before job placement and 6 months later: (1) Those in debt and in fear of garnishment who will receive long-term, low-interest loans, financial counseling, and help in working out a debt amortization plan; (2) those similarly situated who will receive no assistance with their debts; and (3) those who have no fear of garnishment. Loans for the first group will be provided through the Manpower Administration's experimental and demonstration program.

Status of Project: Completion is scheduled for June 1974.

1.5.29 THE WRIGHT INSTITUTE
BERKELEY, CALIF.

CONTRACT NO. 51-05-69-04

Principal Staff: Dr. Edward M. Opton, Jr.

Project Title: Exploratory Investigation of Aids to Financial Independence Among AFDC Mothers

Objectives and Procedures: This study explores the feasibility of obtaining valid data to permit the development of testable hypotheses about why some mothers receiving Aid to Families with Dependent Children (AFDC) are able to become self-supporting and leave welfare while others cannot do so. For 25 AFDC mothers in each of three groups—those who have achieved financial stability and independence, those who have little work experience and have been on welfare continuously, and those who have the "typical" AFDC employment pattern of unstable, often part-time, low-wage work, information is being obtained from interviews and group discussions on such matters as social and family situation, jobseeking methods, assistance from government agencies and staff, self-concept and values, and personality.

Status of Project: Completion is scheduled for September 1970.

SECTION 2. PROJECTS COMPLETED, JULY 1, 1968—JUNE 30, 1969

This section summarizes the major findings of research projects completed during fiscal year 1969. Included are reports on research contracts, doctoral dissertation grants, and research project grants under the Manpower Development and Training Act and research contracts under the Economic Opportunity Act and the Social Security Act. Information on how to obtain project reports is given in section 3.

2.1 PROJECTS COMPLETED, JULY 1, 1968–JUNE 30, 1969—Research Contracts Under the MDTA

2.1.01 ATLANTIC RESEARCH CORP.
ALEXANDRIA, VA.

CONTRACT NO. 81–49–68–19

Principal Staff: Dr. John F. Wallerstedt, Dr. Hans W. Weigert, and Col. Walter R. Lawson, USA (Ret.)

Report Title: An Analysis of Post-World War II Manpower Research, Policy and Program Experience Applicable to Current Manpower Planning for Peacetime Conversion of Military Manpower to Civilian Occupations

Abstract: This study analyzed post-World War II research, policy, and program experience applicable to planning for the conversion of military manpower to civilian occupations following the cessation of Vietnam hostilities.

The authors found that research on adjustment problems of veterans has been limited mainly to military retirees, who constitute only a small part of those who leave the service. They recommended much more research on the 2- and 3-year rank-and-file servicemen who account for the bulk of returning veterans and whose problems differ significantly from those of career soldiers and those of officers. They advocated the planning of manpower research and manpower programs from the point of view of the training and employment needs of young workers before, during, and after military service. Since most of the programs addressed specifically to the problems of Vietnam era veterans are of recent vintage, the researchers were unable to assess the extent to which they may meet this objective.

2.1.02 BUREAU OF THE CENSUS
U.S. DEPARTMENT OF COMMERCE
WASHINGTON, D.C.

CONTRACT NO. MDTA 27-64[1]

Principal Staff: Wilson H. Grabill

Report Title: Childspacing: Spacing of Successive Births to Women, by Age, Duration of Marraige, and Other Characteristics

Abstract: This report presents statistics from the 1960 Census of Population on the fertility and childspacing of birth and marriage cohorts of women by demographic, social, and economic characteristics of the women and their families. The Department of Labor helped fund the tabulations relating the numbers, spacing, and age of children to the labor force participation of the mothers and to the employment and occupational status of their husbands, to obtain new insights into the factors that affect women's propensity to work.

2.1.03 BUREAU OF THE CENSUS
U.S. DEPARTMENT OF COMMERCE
WASHINGTON, D.C.

CONTRACT NO. 81–09–67–17

Principal Staff: Samuel Baum

Report Title: Occupational Classification Study

Abstract: This study helped lay the foundation for a better system of occupational classification for use by Government agencies. Essentially, it developed comparative data on the occupational distribution of the work force under the two current major systems of classification now in use: One by the Bureau of the Census; the other by the U.S. Training and Employment Service in the *Dictionary of Occupational Titles* (DOT).

Entries from the job content sections (Industry, Occupation, and Class of Worker) of a Current Population Survey were transcribed and coded according to the DOT. Tabulations were run comparing the Bureau of the Census occupations with those of the DOT, and the results were presented by DOT classification. Thus, the study produced the first national figures on the size and characteristics of occupational groups classified according to the third edition (1966) of the DOT.

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[1] Several other organizations provided financial support for processing the data and publishing the tabulations.

Further analysis of these data, at the behest of the Interagency Occupational Classification Committee of the Bureau of the Budget, is being undertaken under another contract (see **1.1.45**). Ultimately, the intent is to develop a convertibility list between the two systems and a standard occupational classification system incorporating features of both.

2.1.04 BUREAU OF THE CENSUS
U.S. DEPARTMENT OF COMMERCE
WASHINGTON, D.C.

CONTRACT NO. 81-09-68-46

Principal Staff: David P. McNelis

Report Title: Occupational Survey of State and Local Government Employment

Abstract: This project sought to complete the planning and framework for a nationwide, two-stage mail survey of State and local governments (excluding educational agencies) and their personnel, to obtain data which could relate occupation and government function (agency of employment) to employee characteristics such as age, sex, rate of pay, specialized training and education, and job mobility. This method of obtaining such data was found to be reliable in a pilot survey conducted under a previous contract (see **3.1.14**).

Under the current contract, with support from the Department of Housing and Urban Development, questionnaires were developed and cost estimates made for a survey of all States and all local governments employing at least 300 workers, with a sampling of those employing fewer than 300. A total of 4,870 State and local agencies would be surveyed, representing more than 3.7 million employees, of whom over 37,000 would be contacted.

A trial effort to collect data on budgeted jobs and vacancies revealed that a highly specialized separate survey would be required.

Interest in this project has been expressed by a number of agencies having program responsibilities in various State and local government programs. The Census Bureau plans to incorporate the survey procedures developed to date in the 1972 Census of Governments if multiagency funding arrangements cannot be consummated early in fiscal year 1970.

2.1.05 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

CONTRACT NO. 81-34-67-25

NOTE.—This item summarizes three separate studies completed under this continuing project (see **1.1.08**).

1. **Principal Staff:** Dr. Harry I. Greenfield and Carol A. Brown, Conservation of Human Resources Project

   Report Title: Allied Health Manpower: Trends and Prospects

Abstract: This study dealt primarily with the 1.7 million health workers with less than a college degree who comprise the major source of manpower for the rapidly expanding health services industries. It analyzed their characteristics and the nature of the labor market and personnel practices in the health services industry, as a guide to policies by which the industry can attract the number and type of personnel it sorely needs.

The research found not a homogenous labor market for allied health service personnel but a collection of smaller quasi-independent submarkets composed of separate and rigidly defined occupations. At the lower skill levels, these markets tended to be local or regional, but at the higher skill levels, they were national labor markets.

The atomized labor market led, the researcher concluded, to improper use of the less skilled workers in dead-end occupations, high turnover rates, and job dissatisfaction. Moreover, small employing units, predominantly charitable and nonprofit hospitals, offered relatively low wages and poor working conditions. And the hospitals generally had no administrative hierarchy separate from the professional hierarchy—a condition that further limited upward mobility and inhibited male employment. As a result, the industry attracted a predominantly female work force, including many women who first came into the field 5, 10, or even 20 years after leaving high school.

The scattered location and the relatively small size of the employing units were matched in the industry's training facilities, which therefore did not realize feasible economies of scale, in the researcher's opinion. He also found that the current trend toward shifting training at all levels from hospitals to educational institutions was prolonging training, because of greater emphasis on general education and theory, and hence raising costs and making entry more difficult for the hard-to-employ.

To help overcome these deficiencies, the researcher recommended: (1) Improvement of the education and training facilities for health occupations, including stronger support for the new schools for allied health professions, as well as expansion and redirection of programs under the Manpower Development and Training Act, the Vocational Education Act, and the Economic Opportunity Act to cover occupations not now included; (2) development of more effective job information channels for allied health service workers; and (3) expansion of opportunities for career advancement—with greater efforts to hire more men, more nonwhites, and more part-time workers—supported by the development of stronger hospital management systems.

2. **Principal Staff:** Dr. Marcia Freedman and Gretchen Maclachlan, Conservation of Human Resources Project

Report Title: The Process of Work Establishment

Abstract: This case study of the strategic determinants of the work choices and accommodation to the labor market of young men covered the experience of men who were not college graduates when they were hired by five firms in a large metropolitan labor market —two utilities, two department stores, and an auto assembly plant. This group was studied because the researcher believed that employers' personnel policies are a major determinant of what happens to young people who enter the labor market without strong educational preparation as they seek to become established in a career.

The men studied depended primarily on their immediate personal contacts to help them find a job in the company. Those with occupational skills that were transferable had little difficulty in finding employment, but those without such skills seemed to find their best options in getting attached to a strong organization. Once employed, they appeared to have considerable leverage through their unions.

The process of becoming established appeared to involve a tradeoff between mobility and settling down. The men usually became established between the ages of 25 and 35. At this point, most of them were not using all the education they had acquired. More critical to their progress was specific skill training acquired in school, in the military, or at work. However, work progress was determined mainly by the type of company for which they worked and its policies concerning skill acquisition. Large firms tended to train the skilled men they needed, but small firms tried to hire trained men. Moreover, the large firms often established additional occupational categories, not really based on skill, so they could increase the earnings of men with longer service.

Hence, the researcher concluded that black workers find it difficult to become established in strong organizations; they lack "pull" and the jobs for which they would ordinarily be hired have been growing relatively slowly in recent years. To remedy this situation, the researcher advocated sharing the better opportunities that are opening up with those who do not have a special "in" and reducing the gap in fringe benefits between the preferred sector of the job market and other sectors through raising public benefit levels (Social Security, etc.). She also called for additional linkages up the income hierarchy, taking account of skills as well as years of service, and for restudy by employers of "excessive" requirements for general education for many jobs which actually require specific skills not learned in school.

3. **Principal Staff:** Dr. Dean Morse, Conservation of Human Resources Project

Report Title: The Peripheral Worker

Abstract: This study analyzed the work experience of "peripheral workers"—those who worked less than full time, full year—in 1965, based on data from the annual supplement to the Current Population Survey. Noting that these workers accounted for a large and growing proportion of the labor force (about 45 percent in 1965), the researcher traced the historical, sociological, and economic correlates of part-time and intermittent work.

The researcher found peripheral work experience to be a manifestation of increasing options available to many individuals. Yet some individuals had no options; their personal characteristics and discrimination made it difficult for them to break into regular full-time, full-year employment status. Thus, disproportionate numbers of the peripheral labor force were members of minority groups, women, youth, and older workers, and they were clustered in occupations and industries where unemployment is high and where jobs can be performed by workers with little skill or education and without any significant amount of training.

The labor force is becoming increasingly polarized, with the peripheral force more or less permanently subordinate in status, wage rates, and fringe benefits, the researcher concluded. Peripheral work experience is typically a dead-end affair, and the barriers to movement into regular full-time, full-year jobs are becoming increasingly difficult for most groups of peripheral workers to surmount. The secular increase in the educational attainment of the labor force places many peripheral workers at a disadvantage by confining them increasingly to industries and occupations in which investment in training is markedly less than in those that are dominated by regular full-time workers. As a result, the peripheral worker also is partially or entirely excluded from some of the governmental programs to protect the workers' job equity.

Ironically, the researcher concluded, although high employment and a tight labor market limn the plight of the unwilling peripheral worker most clearly, these conditions are not likely to alleviate his employment problem if he lives in the central core of a large city. They are, however, essential to the success of the manpower policies that are needed to improve the condition of the peripheral worker: (1) The creation of more stable employment opportunities for nonwhites in the areas where they live; (2) the provision of opportunity for employment with substantial on-the-job training, to make up for past deprivations; (3) modifying educational attainment and the possession of a police record as screening devices which now bar many peripheral workers from regular jobs; and (4) inducing the public employment service to make a more direct personal and verbal approach to members of minority groups in testing, counseling, and guidance, to overcome their unfamiliarity with regular hiring channels or channels of information about job and training opportunities.

2.1.06 DEPARTMENT OF DEFENSE
WASHINGTON, D.C.

CONTRACT NO. 81–09–67–20

Principal Staff: Roger F. Riefler

Report Title: Economic Impact of Defense Programs

Abstract: This project sought to expand the semiannual surveys of the impact of defense spending on employment at the State and local levels to include some occupational detail of primary defense employment. The resulting information has been used internally by the Department of Labor's Manpower Administration and other Government agencies.

2.1.07 HARVARD UNIVERSITY
CAMBRIDGE, MASS.

CONTRACT NO. 81–23–68–11

Principal Staff: Dr. Daniel Quinn Mills, Department of Economics

Report Title: A Study of Problems of Manpower Utilization in the Construction Industry: Intermittency of Employment, Unemployment and Labor Shortages

Abstract: The core of this study is an analysis of seasonality and the dynamics of construction manpower, based largely on published government statistics on the construction industry. It examines statistical series on the value of new construction put in place, housing starts, value of building permits authorized, contractors' employment, and unemployment rates, as well as a special study of manpower utilization in the construction crafts,[2] to define the problem of seasonality, the causes of seasonality, and the benefits of reducing seasonality.

Conclusions from this analysis include:

1. "Seasonality in construction employment is most pronounced in periods of general availability of labor and least pronounced when jobs are plentiful elsewhere and unemployment generally is at a low rate." The process by which the industry attempts to meet its manpower needs ". . . is adapted to relatively slack labor markets, and adjusts to shortages only with considerable increases in cost and delays in project completion."

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[2] Results of this study, of which the researcher is co-author, are being published in a Bureau of Labor Statistics bulletin, *Seasonality and Manpower in Construction.*

2. "The same seasonal pattern . . . exists in virtually all areas of the United States, but is more pronounced in the North. . . . The seasonal pattern is a result of unfavorable weather conditions during winter months, traditional practices of the industry, and seasonal patterns in expenditures on structures. The manpower process is adjusted, to the degree permitted by labor market conditions, to the desired seasonal pattern."

3. "The casual nature of construction employment results in the attribution of large numbers of unemployed to the industry (on the 'last job' basis of American unemployment statistics), while masking to a degree the unemployment situation of mechanics with a strong attachment to the industry."

4. "Job security remains essentially nonexistent though the journeyman may follow the work."

5. In the trades where employment is least casual (the electrical and mechanical trades), " . . . formal training and upgrading programs perform a larger role in manpower development and the allocation of manpower among jobs is performed centrally by the labor organization to a greater degree than elsewhere."

The researcher suggested two means of achieving more stable construction employment: Providing greater job security for the workers and promoting increased winter work. The first, he observed, is a question on which "only the parties, especially the contractors, can decide what they will accept." The latter should be pursued through: (1) Specification in collective bargaining agreements of the contractor's obligation to carry out winter work and the union's right ". . . to remove its men from jobs not adequately protected or proceeding. . ."; and (2) explicit specification of the willingness of owners—in statutory form in the case of Federal, State, and municipal governments—and architects to allow, and if possible to require, winter construction. After pointing out several disadvantages of a subsidy program to increase winter work, the researcher concluded that ". . . subsidies and cost-plus arrangements are best avoided in construction."

The report also contains an assessment of the adequacy of current data on construction and a number of recommendations for further research.

2.1.08 ILLINOIS INSTITUTE OF TECHNOLOGY
CHICAGO, ILL.

CONTRACT NO. 81-15-66-17

Principal Staff: Dr. Elmer H. Burack, Department of Business and Economics, and Dr. Thomas J. McNichols, Graduate School of Business, Northwestern University

Report Title: Management and Automation

Abstract: This study analyzed the impact of automation and technological change on top management and on various levels of supervision. Information was obtained from over 70 midwestern plants in industries ranging from petroleum refining, utilities, and steel rolling to meat producing and building products manufacturing. Plants of all sizes and degrees of automation were studied, and more than 600 managers, supervisors, and technicians were interviewed.

The researchers found that management seldom considered what effects the introduction of automation or a complex technological change would have on staffing patterns. Nearly all firms manned the new facilities with recent college graduates rather than upgrading staff already on the payroll through systematic training. The authors suggested that plant personnel could qualify for the new jobs if there were more and better educational facilities within traveling distance.

The study also showed that advances in technology led to greater preference in advancement for personnel with technical degrees and effectively foreclosed promotions for firstline supervisors without such schooling. Moreover, the prestige and authority accorded to "technical support personnel," frequently engendered hostility from personnel who were directly connected with operations or production. Both of these situations have posed serious problems for managers and personnel directors, the researchers found.

2.1.09 UNIVERSITY OF ILLINOIS
URBANA, ILL.

CONTRACT NO. MDTA 5-64

Principal Staff: Dr. Walter H. Franke and Dr. Irvin Sobel, Institute of Labor and Industrial Relations

Report Title: The Shortage of Skilled and Technical Workers

Abstract: This study examined the nature of labor market adjustments to apparent shortages of labor and their impact on attracting, training, placing, and retraining workers. The study, conducted in St. Louis and Chicago, covered practical nurses and medical technologists in hospitals, tool and die makers, tool and die designers, and engineering technicians in the electronics and metalworking industries.

In the two hospital occupations, the researchers found serious and persistent, but not critical, shortages. In the four industrial occupations, despite ". . . some apparently conclusive national trend data and almost universal beliefs . . . verbalized by employers that serious shortages prevailed," no such situation was found, although the supply of workers was described as "tight."

The most severe shortages were found in those occupations to which entry routes were most narrowly prescribed: licensed practical nurse, medical technologist, and tool and die maker. Adjustments were more flexible and faster in the engineering technician jobs, which were most commonly filled by upgrading employees with varied amounts and kinds of education, training, and experience. Hence, the researchers observed, shortages could be ameliorated by permitting broad options of educational preparation and training.

Few industrial employers reported changes in hiring standards or sources or methods of recruitment; for example, Negroes had not penetrated any of the industrial occupations. Moreover, costs had deterred all but the larger firms from undertaking training programs in response to the perceived shortages, and training institutions in the area were operating below capacity and had made little effort to recruit additional trainees.

For the hospitals, however, the use of Negroes and members of other minority groups was found to be an important response to labor shortages. But in St. Louis, the schools of practical nursing had ". . . a relatively long waiting list of qualified applicants."

Some industrial employers reported that shortages had increased the time required to fill orders or the amount of work contracted out, but had not seriously affected the quality of services offered. In the medical occupations, however, the quality of services was lower than it would have been had there been enough qualified personnel.

These differences between the industrial and the hospital occupations prompted the recommendation that special attention be given to the provision of labor supply for "noncompetitive" industries. Beyond that, since the market for each occupation is separate, the adjustment process must be specific in response. For example, the assumption of MDTA that the number of workers in an occupation can be increased by subsidizing the training of unemployed persons is not applicable to medical technologists—the one occupation in which training costs were a barrier to entry. The MDTA approach was found to be ideal for training persons such as licensed practical nurses and useful for preapprenticeship training for tool and die makers. The most general solution to training costs, in the authors' opinion, would be the junior or community college. With the possible exception of the tool and die maker occupation, the junior college could train for all of the occupations studied.

2.1.10 BUREAU OF LABOR STATISTICS
U.S. DEPARTMENT OF LABOR
WASHINGTON, D.C.

CONTRACT NO. 81-09-68-08

Principal Staff: Franz A. Groemping

Report Title: Transition from School to Work in Selected Countries

Abstract: This survey explored the reasons for the apparently easier transition from school to work in other countries (11 Western European nations, Israel, Japan, and Canada) than in the United States.

The author suggests that lower rates of teenage unemployment in major Western European countries reflect social attitudes as well as a number of specifically work-oriented institutions and practices. In addition, young persons are a relatively small part of the population and the proportion of teenagers in the labor force has decreased as the number of years of schooling for most students has increased.

Schooling of most students in Western Europe is highly job directed. After completing compulsory schooling at ages 14–16, the youth generally enter the labor force as apprentices or trainees or enroll in a vocational school for about 1 or 2 years. Only a small minority of school leavers in Europe enter employment which does not include any systematic training.

Vocational guidance and counseling for all young persons needing them are provided in most countries

by the public employment service. Typically, the public employment service was established primarily to deal with unemployment rather than assist employers to find workers. Its function in the school emphasizes vocational orientation while its work outside the school is concerned chiefly with individual guidance, often combined with job placement.

Labor standards and collective agreements in most European countries provide for the employment of minors at rates of pay below normal minimum rates, thus encouraging employers to accept trainees.

This report was presented at the Princeton Manpower Symposium, May 9–10, 1968, on The Transition from School to Work (see **2.1.15**) and is printed in the proceedings of that conference.

2.1.11 UNIVERSITY OF MARYLAND
COLLEGE PARK, MD.

CONTRACT NO. 81–19–37

Principal Staff: Dr. George A. Pownall

Report Title: Employment Problems of Released Prisoners

Abstract: This study investigated the employment problems and experiences of released prisoners in light of their educational background, work history, and vocational or work-related training in prison. Data were obtained from three separate surveys: Official records of a 10-percent sample of all released Federal prisoners under parole and mandatory release supervision on June 30, 1964; official records and interviews of all Federal ex-prisoners under supervision in Baltimore and Philadelphia as of October 31, 1965; and interviews of all Federal ex-prisoners supervised by the Federal probation offices in the two cities at the time of release (October 1, 1965–March 31, 1966) and once a month thereafter, for 3 months.

The study found that released prisoners had a dismal employment record; 20 percent of those in the labor force had only part-time jobs, and 17 percent were unemployed. White men, married men, and men with higher education levels and good employment experience were more successful in getting jobs than their opposites.

The first 6 months after release are crucial to successful adjustment. Most prisoners, however, did not have jobs waiting at the time of release, and some prearranged jobs did not materialize because employment conditions had changed since they were arranged.

To alleviate the postrelease problems of prisoners, the researcher recommended the following measures:

1. Expand work-release programs for on-the-job training and broaden the programs to provide opportunities for younger offenders to study in local vocational schools.

2. Increase prerelease community treatment centers which provide the controlled type of release setting that insures closer supervision and gradual reentry into the community.

3. Focus prison work assignments on establishing good work habits and develop good supervision and meaningful work assignments.

4. Expand employment service assistance to ex-prisoners—most of whom obtained jobs through family, friends, or former employers—by basing more placement officers at the institutions and enlisting more job developers to concentrate on the placement of ex-prisoners.

5. Guarantee bonding of ex-prisoners by Federal and State Governments.

6. Develop diagnostic procedures to adequately gage the deficiencies of ex-prisoners.

The principal investigator for this project was a featured speaker at an institute on employment problems of ex-offenders in Baltimore, Md., in the spring of 1969. Copies of the report are being distributed to directors of all MDTA training projects in correctional institutions supported under section 251 of the Manpower Development and Training Act. Plans are also underway for additional research based upon recommendations made in this study.

2.1.12 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

CONTRACT NO. 81–25–67–02

Principal Staff: Dr. Eva Mueller and others, Survey Research Center

Report Title: Technological Advance in an Expanding Economy: Its Impact on a Cross-Section of the Labor Force

Abstract: This study provides some empirical data on the positive as well as negative consequences of changes in machine technology for the labor force, based on a survey of a representative group of 2,662 labor force participants—1,800 men and the remainder women—selected by multistage probability sampling techniques. The study deals with workers' perceptions of changes in machine technology in connection with their jobs during the years 1962–67 and assesses the extent to which such changes have affected jobs.

The study found that technological changes had a limited effect on the labor force as a whole, despite the fact that between 75 and 80 percent of the workers said that machinery had an important bearing on their work. Although technological advance materially affected the jobs of 1½ to 2 million workers in each of the 5 years studied, its effect on employment was largely indirect. Firms introducing laborsaving machinery could rely on normal attrition and expanding markets to balance labor supply and needs, so the brunt of any associated unemployment appeared to fall on the most marginal groups in the labor force, together with those hired by technologically backward firms. Hence, the author concluded, marginal workers should receive special attention in retraining and other programs to ease the impact of technological unemployment.

Higher income and greater job satisfaction were the typical results of a change in machine technology for the workers affected. Despite the occasional unemployment which resulted, they reported income gains more frequently than workers who continued working with the same equipment. Moreover, those who experienced changes in job content reported that their new tasks were more demanding and that they had acquired new skills and exercised more judgment and initiative in organizing their work more often than they reported that the changes had made their jobs more monotonous and downgraded their skills.

The survey confirmed that advancing technology requires a well-educated work force; persons with the higher educational attainments usually worked with the more advanced machines and equipment. It did not, however, answer the question of whether the high level of education associated with modern equipment is required to operate the equipment.

2.1.13 UNIVERSITY OF MINNESOTA
MINNEAPOLIS, MINN.

CONTRACT NO. 81–22–01

Principal Staff: Dr. Herbert G. Heneman, Jr., and Dr. Rene V. Dawis, Industrial Relations Center

Report Title: Youth Unemployment: Frictions in the Threshold of the Work Career—An Exploratory Probe

Abstract: This study examined the attitudes toward work of high school graduates and dropouts in relation to their subsequent employment experience. Attitudes were measured by the Youth Opinion Questionnaire (YOQ), an instrument developed specifically for this project and standardized on more than 9,000 students in grades 9 through 12 of Minneapolis and St. Paul public schools. Followup interviews were conducted with 183 graduates and 90 dropouts.

The researchers found that, although much of the considerable variation in the students' work attitudes could be attributed to differences in sex, age, social class, and sibling position, it accounted for some of the differences in work experience that could not be explained by demographic and biographical variables.

The YOQ scales most useful in predicting the success of beginning work experiences of high school graduates were those measuring self-sufficiency and risk-taking. Useful predictors also included scales related to working conditions, reason for working, personal influence, self-expression, and job steadiness.

In comparing the initial work experience of dropouts and graduates, the researchers found that dropouts had held more jobs, were more apt to be unemployed, and had been on their present job for shorter periods of time. However, no difference was found between the two groups in job satisfaction.

2.1.14 NATIONAL INDUSTRIAL CONFERENCE BOARD
NEW YORK, N.Y.

CONTRACT NO. 81–34–66–13

Principal Staff: Dr. John G. Myers

Report Title: Job Vacancies in the Firm and the Labor Market

Abstract: This study reviewed and coordinated some theoretical aspects of measures of job vacancies and tested the consistency of these theories with sets of cross-section data. The study, the first to analyze job vacancies by firm, found logical internal consistencies between the firms' reported job openings and their turnover, growth in employment, overtime, etc. The sampling procedure was reported in *An Optimal Sample Design For a Job Vacancy Survey*, prepared by Maria Elena Gonzalez (see **3.1.75**).

Job vacancies have two related purposes in determining the balance, or degree of tightness, in the labor market: (1) To determine the degree of adjustment necessary to obtain "full employment"; and (2) to understand wage movements caused by the pressure of demand in the labor market.

This study concluded that total job vacancies less total unemployment furnish a better measure of pressure on wages than any alternative available. Since the number of hours associated with vacancies may differ from those associated with unemployment, and vacancies normally have a higher skill level than the unemployed, movements in the measure should be a more reliable indicator of pressure on wages than its level.

The report also furnished evidence that job opportunity data have a promising potential, when combined with other job market data, as measures of the relative importance of functional and cyclical sources of unemployment. Further, the wide diversity among areas, both in the degree of tightness and in the amount of friction in the labor market, suggested that policies designed to reduce unemployment should take this diversity into account. According to the researchers, the mix of policies in individual areas should differ according to the relative importance of friction and of inadequate demand revealed by their vacancy and unemployment rates.

2.1.15 NATIONAL MANPOWER POLICY TASK FORCE

WASHINGTON, D.C.

CONTRACT NO. 81-51-68-22

Principal Staff: Dr. Garth L. Mangum and Arnold Nemore

Report Title: The Transition from School to Work, A Report Based on The Princeton Manpower Symposium, May 9–10, 1968, organized by the U.S. Department of Labor; U.S. Department of Health, Education, and Welfare; National Manpower Policy Task Force; The Woodrow Wilson School and the Industrial Relations Section, Princeton University

Abstract: This report is based on a symposium held at Princeton University designed to assess the dimension of youth unemployment problems and to discuss the role and responsibilities of different institutions in remedial efforts. Approximately 60 experts from education, business, government, and unions participated.

The participants generally accepted the estimate that about a third of all youth—roughly 1 million persons a year—encounter quite serious problems in making the transition from school to work. Most agreed also that little is known about the process by which youth make this transition or about the obstacles encountered by different groups of youth. Proposals for further research included studies of employer experiences with and attitudes toward hiring young people, subsidies for employer training programs, improved counseling services for noncollege-bound youth, and costs and benefits of different educational programs.

There was strong opposition to youth differentials for regular employment, reflecting in part the prevailing view that the minimum wage had a comparatively unimportant impact on youth unemployment. However, it was felt that young people in training in high-wage industries might be paid less than established rates, but not below the legal minimum.

There was widespread support for cooperative education programs; it was suggested that a major impediment to their growth is difficulty in finding qualified coordinators to direct them.

A high point of the symposium was a proposal for a "guaranteed training scheme" in which every person would have the right to 14 years of free education and training at any time in schools, employing institutions, or other appropriate organizations.

Nearly all participants favored an increase in the level of Federal support for vocational education, the public employment services, MDTA training, research and evaluation efforts, and other special education and training programs. There was a general feeling that the most suitable role for the Federal Government is as an initiator and that one of its major functions is to find new solutions to old problems and stimulate change.

2.1.16 NATIONAL MANPOWER POLICY TASK FORCE
WASHINGTON, D.C.

CONTRACT NO. 81–09–69–01

Principal Staff: Dr. Garth L. Mangum and Arnold Nemore

Report Title: Report of Conference of New Manpower Researchers

Abstract: This report discusses the second annual Conference of New Manpower Researchers held in September 1968 in Washington for 35 manpower researchers receiving MDTA doctoral dissertation grants. Four of the 49 participants in the 1967 conference also attended. The conference aimed at exposing new manpower researchers and their work to their peers, to senior manpower experts, and to governmental manpower staff.

At the first session of the conference, senior manpower researchers reviewed the Government's manpower research effort, the research implications of some current key manpower issues, and the evolution of manpower policy and problems. At each of the remaining sessions, three new researchers were selected to make short presentations based on their dissertation research. Short summaries of these presentations are included in this report along with "sense of the meeting" papers prepared by Department of Labor staff for each substantive session. Topics for the sessions were: Evaluating Manpower Programs; Scientific and Engineering Manpower; Migration; Poverty and Employment; Labor-Market Analysis; and International Studies.

Participants felt that the conference served a valuable purpose in bringing them together as they normally have very limited contact with others in the field. Based on this response, the Task Force recommends that similar conferences be held annually.

2.1.17 NATIONAL PLANNING ASSOCIATION
WASHINGTON, D.C.

CONTRACT NO. 81–09–67–08

Principal Staff: Norman Frumkin

Report Title: Manpower Implications of Alternative Priorities for Coping With Poverty

Abstract: This pilot study supplements a project sponsored by the Department of Labor's Manpower Administration (see **3.1.84**) which estimated the occupational employment required in 1975 for specified levels of achievement for an illustrative set of 16 goals encompassing most aspects of American life. The present study focused on the alleviation of poverty, which was not separately identified as a goal in the initial research, and developed an antipoverty package by combining elements of related goals—social welfare, job training, health, education, urban development, and agriculture.

Assuming an average annual increase of 4.5 percent in gross national product, the effects of two feasible levels of expenditures in the effort against poverty were analyzed: (1) An expenditure of $75 billion (in 1965 prices) if defense expenditures are reduced to the pre-Vietnam levels of 1965; and (2) an expenditure of $59 billion, if defense outlays remain comparable to those of 1967. These totals compare with 1965 expenditures of about $29 billion in public and private funds. The smaller antipoverty effort places more emphasis on increasing the longrun employability of the poor rather than immediately raising their living standards.

Among the study's findings were the following:

1. The higher level of expenditures would reduce the number of persons in families with poverty incomes from 32 million in 1965 to about 25 million in 1975. Factors contributing to the decline would be expansion of antipoverty programs, including income maintenance payments, job training programs, and increases in statutory minimum wage rates. Most of the decline would, however, reflect economic growth and accompanying increases in jobs and earnings in less skilled occupations.

2. Four-fifths of expenditures for antipoverty programs (at either projected level) are expected to be made by various levels of government.

3. Anticipated shortages in such critical occupations as social worker, teacher, nurse, doctor, and hospital technician could seriously hamper the antipoverty effort unless active manpower policies are implemented. Many of the 31 occupations which could become bottlenecks typically require several years of special education, training, or apprenticeship.

Recommendations to meet the increasing need for manpower at all skill levels in the 1970's included the following:

1. An adequate supply of labor can only be achieved by filling more jobs with the poor. Thus over the next 6 or 7 years, the poor should be provided with the necessary education, training, and counseling to prepare for occupations in which job openings are expected to grow rapidly. If the training is to lead to employment, government, employers, and trade unions must reduce entry barriers, as well as provide equal promotion opportunities for nonwhites.

2. Vocational counseling, as one of the earliest stages for manpower planning, should encourage students to pursue studies in fields where there are occupational shortages.

3. Training and education programs should be geared to meet anticipated increases in the number of openings arising from attrition (from causes such as death and retirement, or marriage and childbirth for women) as well as from normal economic growth.

4. Shortages in the anticipated bottleneck occupations—for example social work, teaching, nursing, and hospital care—which typically employ a high proportion of women could be reduced by recruiting housewives who left these occupations to raise families.

5. The projected shortages in hospital service occupations could be reduced by raising productivity, earnings, and job security.

6. Potential bottlenecks could be reduced by increased use of volunteers as teachers, nurse aids, neighborhood workers, homemakers, and tutors.

2.1.18 UNIVERSITY OF NORTH CAROLINA
CHAPEL HILL, N.C.

CONTRACT NO. MDTA 26–64

Principal Staff: Dr. Robert R. Cadmus, Dr. James P. Harkness, and Lois P. Tillman, School of Medicine

Report Title: A Manpower Study of Technical Personnel in Hospital Clinical Laboratories

Abstract: This study reports on the characteristics of laboratory workers and compares the quality of laboratory work performed in small, medium-sized, and large hospitals. A random sample of 199 laboratory workers in 29 North Carolina hospitals participated in the study.

Almost 85 percent of the workers in small hospitals (less than 100 beds) and 71 percent in medium-sized hospitals (100–299 beds) had been trained in commercial schools or on the job. In large hospitals, 68 percent were more highly trained medical technologists certified by the American Society of Clinical Pathologists.

Laboratory output, as measured by numbers of tests and workers per bed, was the same in all hospitals, but the quality of the work increased with hospital size. The measures of quality were based on the workers' accuracy on tests of unknown substances and six standards covering laboratory procedures, equipment, personnel, and supervision. Small hospitals were generally rated poor, medium-sized average to excellent, and large hospitals excellent.

The variations in quality were attributed more to the nature of supervision than the training or experience of workers. In the large hospitals, the laboratory had a full-time pathologist, was supervised by a certified technologist who kept abreast of new developments and had a voice in management decisions, and provided for the continual upgrading and training of workers. In the small hospitals and some of the medium-sized hospitals, the pathologists were employed part time, selection of the laboratory supervisor was based first on years of service, and the laboratory staff was almost isolated from technical advances in their field.

According to the researchers, increasing automation may help upgrade quality and reduce the need for highly trained workers. However, in small hospitals, where the quality of work is lowest, the volume of work is below that considered reasonable for automation. The authors therefore recommended the establishment of automated regional hospital laboratories staffed by workers trained in large hospitals, thus improving the distribution of qualified workers.

2.1.19 THE PENNSYLVANIA STATE UNIVERSITY
UNIVERSITY PARK, PA.

CONTRACT NO. 81–40–68–20

Principal Staff: Dr. Jacob J. Kaufman and Dr. Louis Levine, Institute for Research on Human Resources

Report Title: A Report on Two Workshops on Manpower Research

Abstract: This project conducted two manpower research-oriented conferences, at the University of Tennessee and at San Francisco State College, to encourage a carefully selected group of university people who had recently been awarded their doctoral degrees to specialize in the manpower field and engage in relevant research.

2.1.20 THE PENNSYLVANIA STATE UNIVERSITY

UNIVERSITY PARK, PA. and the

BUREAU OF EMPLOYMENT SECURITY
U.S. DEPARTMENT OF LABOR
WASHINGTON, D.C.

CONTRACT NOS. 81–40–67–05
81–40–67–09

Principal Staff: Dr. Jacob J. Kaufman and Dr. David W. Stevens, Institute for Research on Human Resources

Report Title: Supplemental Labor Market Information as a Means To Increase the Effectiveness of Job-Search Activity

Abstract: This report gives the results of an experimental program to facilitate job finding by unemployed workers by giving them, when they registered at the local employment office, not only the usual services but also a list of employers who were known to employ workers with skills similar to their own.

Compared with a control group similar in age, sex, color, marital status, and occupation who received only the normal services, the experimental group as a whole were not significantly more effective in their job search. Negroes participating in the experiment did have significantly greater success in job finding, but none of them attributed his success to receiving the list of employers.

Based on these findings, the researchers considered it likely that some individuals can use supplemental labor market information more effectively than others. They recommended further research to find out what kinds of jobseekers would benefit most and what kinds of supplemental information would be most effective. These problems are now being studied under another Manpower Administration contract with one of the same researchers (see **1.1.42**).

Insights gained in the original study are being used in the U.S. Training and Employment Service (USTES) in efforts to streamline job finding for skilled and experienced workers so that the USTES can devote more time and facilities to dealing with the employment problems of inner-city residents.

2.1.21 CITY OF PHILADELPHIA

PHILADELPHIA, PA.

CONTRACT NO. MDTA 14–64

Principal Staff: Richard L. Olanoff, Manpower Utilization Commission

Report Title: A Study of the Effects of Pre-Vocational Training and Family Service Counseling on the Long-Term Unemployed

Abstract: This study sought to determine whether the trainability and employment prospects of long-term unemployed men could be improved by a program of prevocational training, either singly or in combination with social casework counseling. The 10-week program included evaluation (work sample and psychological tests), training in adjusting to progressively demanding supervision while performing production tasks, and, for those in the counseling group, interviews with a social case-worker. The agencies providing these services—the Jewish Employment and Vocational Service and the Family Service of Philadelphia—also attempted to evaluate the subjects' work capacity and determine whether they were ready for regular competitive employment or needed services offered in a sheltered work environment. In addition, Greta Zybon, of the Bryn Mawr College Department of Social Work and Social Research, used the Family Service's casework records to categorize the characteristics of men with different degree of job readiness. Special attention was given to the effect of personal, emotional, social, and physical stresses on capacity and motivation for work.

A sample of 546 long-term unemployed male residents of Philadelphia, 19 years and older, who agreed to participate in the study were assigned to two experimental and two control groups and a "normal" group. Men in the experimental and control groups needed either work adjustment training only or work adjustment training and social service counseling, but only the experimental groups received these services, and men in the normal group neither needed nor received them. However, because of project difficulties, comparisons could be made only within the experimental groups.

The findings indicate that those who finished the experimental programs were more likely to be offered, accept, and finish MDTA training, than those who did not complete the program but had no significant advantage in either employment or earnings in a 6-month postprogram followup. The researchers felt that a continuation of supportive services, especially counseling, might have preserved the gains from work adjustment and MDTA training. They also called for better orientation on the objectives of social casework counseling, which was rated as not helpful by two-fifths of those who received it.

Evaluations by psychologists of the subjects' work capacity were found useful in predicting MDTA training performance and subsequent employment. The researchers therefore urged further development of a diagnostic testing system to facilitate assignment to programs suited to the individual's needs.

2.1.22 PRINCETON UNIVERSITY
PRINCETON, N.J.

CONTRACT NO. 81–32–67–19[3]

Principal Staff: Dr. Orley Ashenfelter, Industrial Relations Section

Report Title: Systems Analysis and the Labor Market

Abstract: This exploratory study investigated the use of systems analysis techniques in the analysis of job market operations. It developed findings using a series of econometric models which enable analysts and policymakers to trace the effects of both external pressures and alternative manpower policies in the American system of job markets.

A conceptual model of the interaction of labor markets was formulated, and an intensive empirical and theoretical investigation was conducted of the aggregate supply, demand, and wage adjustment relationships. An aggregate macromodel of the U.S. market was constructed and fitted to post-World War II quarterly data.

More specific areas of labor market analysis were examined, including: (1) Inflation-unemployment trade-offs; (2) the effect of exogenous changes in military manpower on civilian employment and unemployment; (3) the declining interindustry mobility of American workers; i.e., "industrial feudalism"; and (4) changes in discrimination against Negroes in the postwar period. These studies were summarized in *The Second Year Report on Systems Analysis and the Labor Market.*

In conclusion, the report commented on the relevance of systems analyses or model building for labor market and manpower analysis. While such exercises may be a helpful addendum to the information which a policymaker must have for adequate decisionmaking, modelbuilding procedures will not have a very high payoff in many problem areas in labor market analysis because of uncertain inferences and a heavy reliance on inadequate data. The most fruitful information and investigation of manpower and labor market problems will come from a careful mixture of modelbuilding and judgment based on well-informed and objective familiarity with institutions to be investigated.

2.1.23 RESEARCH TRIANGLE INSTITUTE
DURHAM, N.C.

CONTRACT NO. 81–35–67–01

Principal Staff: Dr. William C. Eckerman, Eva K. Gerstel, and Richard B. Williams

Report Title: A Comprehensive Assessment of the Problems and Characteristics of Neighborhood Youth Corps Enrollees: A Pilot Investigation

Abstract: This study analyzed the characteristics of Neighborhood Youth Corps (NYC) enrollees in North Carolina in early 1968 and their proficiency in academic and job-related skills in order to estimate their current ability to benefit from further education, training, or employment.

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[3] Support for this project was also provided by the Office of Education, U.S. Department of Health, Education, and Welfare, U.S. Department of Commerce, the National Science Foundation, and the National Bureau of Standards.

Identical proportions—about two-thirds—of the sample of 202 in-school and out-of-school enrollees were Negro, female, and in rural programs. Three-fifths of the enrollees needed dental care, and two-thirds had eye trouble. About half (including those still in school) had failed at least one grade. One-third of those in the out-of-school program had not gone beyond the eighth grade. Two-fifths of the girls dropped out because they were pregnant, and about as many boys left school because they didn't like it or had "flunked out."

While the tests of proficiency in job-related aptitudes and basic school subjects (mainly the Wide Range-Achievement Test and the General Aptitude Test Battery, together with GATB "critical scores" for Occupational Aptitude Patterns) do not necessarily measure potential, but they do indicate the various types of assistance from which enrollees can benefit. On the basis of test scores, 21 percent were classified as *educable*—capable of finishing high school—including 12 percent who could do at least some college work if they get the necessary financial assistance. Another 36 percent were designated as *trainable;* they were functioning at the seventh- or eighth-grade level, but had the clerical and manipulative aptitudes for a variety of skilled and semiskilled blue- or white-collar jobs which they could do, if given training and in some cases remedial education. Another 14 percent were classified as *marginally trainable;* their educational deficiencies (WRAT scores at the fourth- or fifth-grade level) raised questions about their capacity for training, but they had the aptitude for such low skilled jobs as machine feeder, sewing machine operator, and apple packer. The remaining 29 percent did not meet minimum aptitude requirements for any of the 36 Occupational Aptitude Patterns but were deemed *employable* in very low skilled jobs (for example, maid, porter, farm laborer). The last two groups were functioning at or below the norms established for the lowest 10–12 percent of the labor force. They were also the least motivated and had the most negative outlook on life—findings confirmed by both former teachers and current work supervisors. Any substantial upgrading of these enrollees would, the authors concluded, require a major rehabilitation program, including motivational training, intensive counseling, remedial education, and job training.

The widespread degrees of skill among the enrollees argue, in the authors' view, for an equally diversified NYC program and links with other programs for those "graduates" who need and can benefit from further help—whether to continue their education, to take further training, or to find a job. It also calls for an overall testing program as a guide to the youth's needs.

Some of the authors' specific suggestions for NYC improvement were included in the Labor Department's recent recommendations for changes in training programs for youth. The findings of this study will also be included in a publication summarizing several research studies on the NYC sponsored by the Department.

2.1.24 SOFTWARE SYSTEMS, INC.
FALLS CHURCH, VA.

CONTRACT NO. 81–49–68–31

Principal Staff: Dr. Harold C. Strasel and Paul G. Larkin

Report Title: Rioters in Washington: A Study of People and Employment

Abstract: This analysis of a sample of questionnaires completed by the District of Columbia Bail Agency for persons arrested during the April 1968 riot in Washington, D.C., was intended to provide information on the background and employment experience of persons arrested. The data cover 978 persons charged with felonies or misdemeanors (mostly burglary II), but not those under 18 years of age or those charged with curfew violations.

As in most other studies of rioters, about nine-tenths of those arrested were men. Nearly all were Negroes, and almost half were under 25 years of age. About 2 of every 5 reporting their marital status (325) were married and living with their spouse, and another 114 were separated or divorced. Some 530 said they had children, and about 86 percent were supporting or helping support them.

About 1 of every 9 respondents reported some physical disorder, and a small number had been hospitalized for a mental disorder or admitted being drug addicts or alcoholics. About one-fourth (mostly men) reported a prior criminal record (excluding minor traffic violations and drunkenness arrests), and most of these were or had been on probation, parole, or conditional release.

Over half of the prisoners had lived in the Washington area for at least 15 years, and the median length of time at the current address was 2.2 years. Some 70 percent resided in a poverty area, but only about 30 percent lived in the area of the rioting.

About 3 of 10 had completed high school and a few had gone to college. Half had dropped out of high school before graduating. One of every 8 was still a student, usually in high school or college.

Nearly 81 percent were employed, and the others were about evenly divided between the unemployed and those not in the labor force. The average duration of unemployment was nearly 9 weeks, but 1 in 3 had been out of work for 15 weeks or more.

Among the employed, average job tenure was a little more than 1 year, but a fifth had held the same job for at least 5 years, and a fourth, for less than 4 months. Take-home pay averaged $83 a week. Three occupational groups—laborers, operatives, and service workers—each accounted for between one-fifth and one-fourth of the employed, and clerical and craftsman jobs together accounted for a similar proportion.

Although the researcher concluded that none of these findings "explained" the prisoners' alleged participation in the rioting, they did confirm the Kerner Commission's finding that the major employment problem for Negro men living in poverty areas is less a matter of more jobs than of better jobs.

2.1.25 STANFORD UNIVERSITY
PALO ALTO, CALIF.

CONTRACT NO. 81-05-66-11

Principal Staff: Dr. Joseph Katz, Dr. Harold A. Korn, and Dr. Max M. Levin, and Carole A. Leland, with the assistance of Ronald L. Starr, Institute for the Study of Human Resources

Report Title: Class, Character, and Career: Determinants of Occupational Choice in College Students

Abstract: This study investigated the process by which college students choose careers and the factors which influence their decisions. Selected undergraduate students at Stanford University and students enrolled in San Jose City College, a 2-year institution, were given an occupational development questionnaire, the California Psychological Inventory, and the Strong Vocational Interest Blank. In addition, 1965 Stanford graduates were sent questionnaires requesting information about changes in their occupational plans and their current occupational and educational status.

The researchers found that career choice is far from a planned, rational process. Small incremental decisions, along with many contingencies, determined the eventual choice, and appropriate occupations stood the risk of being rejected or overlooked, often for seemingly trivial reasons.

Many of the young people had career values and expectations that were out of harmony with actual occupational structures. They rejected careers in large organizations (including government and other nonprofit institutions), wanted upward mobility but rejected supervisory responsibilities, and preferred not to work as members of a group or team. They regarded the prospect of becoming cogs in an impersonal, large-scale organization as incompatible with their desires for self-expression, participation in decisionmaking, and sense of the human community.

The researchers concluded that it is not work as such which meets with disfavor, but certain styles of work and organizational settings. Next to family, careers were valued more highly than other areas of life, particularly among the upper middle class.

Marked differences in personality and vocational interests between the two student samples were found to be associated with differences in family background and social class. The researchers regard this finding as a challenge to current vocational development theory.

Significant differences were also observed in career decisions between men and women. The researchers suggested that these differences are not adequately recognized in educational planning and college curriculums.

2.1.26 THE W. E. UPJOHN INSTITUTE FOR EMPLOYMENT RESEARCH
WASHINGTON, D.C.

CONTRACT NO. 81-09-67-22

Principal Staff: Dr. Sidney Fine

Report Title: The Feasibility of a Direct Method of Obtaining Manpower Demand Data

Abstract: As a possible alternative to present government methods of estimating occupational employment on the basis of job description or titles, this study explored the feasibility of using functional job analysis (FJA), based on the functional and educational requirements of jobs. In FJA, two scales are used to evaluate job content: One measures the involvement of the person performing the job with things, data, and people; the other estimates the levels of competence in reasoning, mathematics, and language required to perform the functions which comprise the job.

In this study, a sample of firms in one industry was asked to complete questionnaires similar to those used by the Department of Labor's Bureau of Labor Statistics in its occupational surveys. Personnel of these firms were later interviewed to obtain similar data using the FJA method.

The researcher concluded:

1. The FJA occupational classification manual devised for the study was largely self-administering, following initial briefing on its use, and the study suggested improvements in the functional rating scales which could make the manual more practical for self-administration.

2. Classification data for FJA must be gathered by personnel technicians familiar with occupational classification, and not by clerical personnel.

3. The FJA rating method, as tested in this study, seemed reliable within a plant and among the several raters participating in the test in a given plant. Variations across plants were ". . . more or less in the expected directions."

4. The FJA reporting method ". . . reflected differences in functions and educational requirements between large and medium/small plants, between specialized and enlarged jobs in particular establishments, and between rating from the vantage point of industry as compared to rating from the vantage point of job descriptions. It also was sensitive to the different involvements of clerical, production, and maintenance jobs with Things, Data, and People."

5. Job ratings made by government manpower specialists from job descriptions overestimated educational requirements, in comparison with the FJA method.

2.1.27 WOMEN'S BUREAU
U.S. DEPARTMENT OF LABOR
WASHINGTON, D.C.

CONTRACT NO. 81–08–08[4]

Principal Staff: Pearl G. Spindler, Women's Bureau, and Seth Low, Children's Bureau

Report Title: National Survey of Child-Care Arrangements of Working Mothers in the United States

Abstract: This study examined arrangements made by working mothers for care of their children, by means of supplementary questions in the Current Population Survey for February 1965. In the resulting tabulations, the data are classified by the characteristics of both the mothers and the children.

More than 6 million mothers who had at least one child under the age of 14 living with them reported that they had worked 27 weeks or more in 1964, either full or part time. Some 12 percent of the mothers were heads of households; 84 percent were living with their husbands.

Nearly half of their 12.3 million children were cared for in their own homes while their mothers were working, by a relative other than the father (21 percent of the children), by the father (15 percent), or by a nonrelative (9 percent). Of the children cared for by a relative other than the father, nearly two-fifths were attended by a person under 16 years of age, presumably a brother or sister, or by a person at least 65 years old, presumably a grandparent. Half of the nonrelatives caring for children had no other duties; the other half were housekeepers or maids in addition to caring for children.

More than a fourth of the children either were looked after by the mother while she was working (13 percent), usually in a family business or on a farm, or did not require special arrangements because the mother worked only during school hours (15 percent).

Nearly one-sixth were cared for in someone else's home; about half of these were in a relative's home.

About 8 percent of the children cared for themselves while their mothers were at work; although half of these children were either 12 or 13 years old, several thousand of them were under the age of 6.

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[4] This study was a joint undertaking by the Women's Bureau of the U.S. Department of Labor and the Children's Bureau of the U.S. Department of Health, Education, and Welfare.

Only 3 percent of the children received group care in a day-care center, nursery school, or similar facility (including someone else's home where a nonrelative cares for six or more children other than her own).

Child-care arrangements usually covered all of the time the mother was away at work. However, 11 percent of the children required supplementary arrangements, generally in the child's own home. More than a fourth of the children in group-care centers required supplementary arrangements.

Discussion of the preliminary findings of this study at the 1965 White House Conference on Children and Youth led to a strong recommendation that more and better group-care facilities be provided.

2.1.28 WOMEN'S BUREAU
U.S. DEPARTMENT OF LABOR
WASHINGTON, D.C.

CONTRACT NO. 81-09-68-15

Principal Staff: Mary Dublin Keyserling

Report Title: Conference on Meeting Medical Manpower Needs: The Fuller Utilization of the Woman Physician

Abstract: This conference, held in Washington, D.C., in January 1968, brought specialists in the areas of medicine, manpower, and medical education together to explore the question of how to effect fuller utilization of the woman physician.

Many participants felt that improved utilization of women physicians alone could not remedy the shortage of health services. Instead, they proposed rationalization of the system by which these services are produced and delivered.

Among the recommendations made for facilitating the effective use of women in medicine were: (1) Better counseling and guidance during the formative years; (2) arrangements for part-time training for women with young children; (3) development of child-care facilities; and (4) support of retraining programs for inactive women physicians.

2.2 PROJECTS COMPLETED, JULY 1, 1968–JUNE 30, 1969—Doctoral Dissertation Grants Under the MDTA

2.2.01 UNIVERSITY OF ARKANSAS
FAYETTEVILLE, ARK.

GRANT NO. 91–04–66–70

Doctoral Candidate: Emmett Earl Wright, College of Business Administration

Sponsor: Dr. John M. Peterson

Dissertation: Industrial Recruiting Experience in Small City Job Markets

Abstract: This study examined the availability of labor for new factories in small city job markets (in rural regions), the characteristics of available workers, and the impact of new plants on the labor markets. Case studies were conducted in six manufacturing plants in a three-county area in northwest Arkansas and a five-parish area in north-central Louisiana, and other local employers were interviewed.

The researcher found that the new plants encountered little difficulty in recruiting the workers they wanted. In fact, the area's labor force increased by nearly one-third between 1960 and 1966. The major sources of recruits were persons who were underemployed and those not previously in the labor force (nonparticipants and new entrants). The unemployed did not exceed 25 percent of the new recruits in any firms. Moreover, the additional jobs attracted inmigrants and tended to slow or stem out-migration. In the Arkansas area, there was a switch from considerable out-migration between 1950 and 1958 to notable in-migration thereafter.

The workers recruited by the new plants were observed to have more desirable work histories and personal characteristics than those presently unemployed. The latter usually had little previous experience in manufacturing, had relatively unstable work histories, and had been without work for fairly long periods of time. The plant workers, however, had also done considerable job shifting, roughly in proportion to the desirable employment alternatives available in the area.

Other local employers were usually able to replace workers recruited by the new plants, although the tightening labor market brought fewer applicants at the lower paying firms and less qualified job applicants in general. A majority of firms raised wage rates, but labor costs did not increase significantly relative to those in other areas.

The researcher noted the desirability of gradual recruitment by new plants in order to allow time for local readjustment to the increased labor demand. He recommended further research on such subjects as causes of the high rates of labor turnover and absenteeism in small city job markets; jobseeking methods of rural residents; and reasons for labor force nonparticipation when suitable jobs are available.

2.2.02 UNIVERSITY OF CALIFORNIA, LOS ANGELES
LOS ANGELES, CALIF.

GRANT NO. 91–05–68–73

Doctoral Candidate: Gerald I. Susman, Graduate School of Business

Sponsor: Dr. William H. McWhinney and Louis E. Davis

Dissertation: An Investigation of Task Allocation Decisions in Autonomous Work Groups in a Continuous Process Industry

Abstract: This study tested the hypothesis that autonomous work groups assign tasks to their members by matching each worker's perceived competence with the skill required for the task. An autonomous work group was defined as one in which the members could alter the set of tasks assigned by management to a position, and exchange positions within the group. Three questionnaires were administered to several managers and 14 employees of an oil refinery—five stillmen and nine stillmen helpers. Thirteen work groups were constructed, using a rotating system with one stillman and two helpers per group.

The researcher confirmed his hypothesis, for stillmen (i.e., those judged more competent by their fellow workers) were allocated tasks judged as requiring more skill. Among stillmen helpers, however, the highly skilled were allocated low-skill tasks. The researcher suggested that, because men in higher positions (stillmen) identified with management, they themselves performed the tasks which would accomplish management's objectives. Men in lower ranked positions preferred performing low-skilled tasks in order to pursue social activities while on the job. The researcher thus concluded that formal position differentiation was harmful in autonomous work-group situations, and recommended that each member of a group have equal opportunity to perform all tasks.

The researcher observed that within each work group, employees identified more tasks than had been assigned by management. In addition, the tasks differed for each individual from group to group. The investigator suggested these phenomena were a function of autonomy and might be attributable in part to the unpredictable sequence of tasks.

2.2.03 THE CATHOLIC UNIVERSITY OF AMERICA
WASHINGTON, D.C.

GRANT NO. 91-09-68-30

Doctoral Candidate: Rev. Victor P. Salandini, Department of Economics

Sponsor: Leonard F. Cain

Dissertation: The Short-Run Socioeconomic Effects of the Termination of Public Law 78 on the California Farm Labor Market for 1965-67

Abstract: This study investigated the effects on the California farm labor market of Public Law 78—enacted in 1951 to authorize the contracting of Mexican nationals to perform seasonal farmhand labor in areas where there was a domestic farm labor shortage—and its termination in 1964. The research was conducted in Imperial, Ventura, Monterey, and San Joaquin counties, where contracted Mexican farm laborers constituted a significant part of the labor force, with emphasis on the principal crops of those counties: Asparagus, lemons, lettuce, strawberries, tomatoes, and valencia oranges. Extensive material was also drawn from research reports and testimony at public hearings, as well as relevant statistical series.

The study focused on the controversy surrounding the Public Law 78 program: the balancing of the needs of the growers for additional labor against the needs of domestic farmworkers for regular employment at adequate wages, under acceptable working and living conditions. The researcher concluded that the advantages to the growers of the law were doubtful, whereas the disadvantages to the domestic farmworkers were clear cut, and that termination of the law had only minimal and transient effects on the growers but benefited domestic farmworkers.

Increased employment opportunities were cited as the clearest gain for domestic farmworkers. Between 1964 and 1967, the average employment of seasonal domestic farmworkers in California rose by about 10,000 while total agricultural employment was falling by 24,000. The researcher found, however, that "green card" holders, who commute daily from Mexico to work in Southern California, and "wetbacks," who enter the United States illegally, continued to be an important source of labor during periods of peak demand. For example, he reported that the number of wetbacks apprehended by the U.S. Immigration and Naturalization Service rose from about 44,000 to 108,000 between 1964 and 1967.

In addition, the researcher found, the expiration of Public Law 78 contributed to lower unemployment, a marked increase in the number of days worked among domestic farmworkers, and a rise in wage rates in 1965 and 1966 in each of the crops studied. There was also some evidence that termination of the bracero program brought increased efforts in the areas of housing, field sanitation, and safety as a means of attracting and keeping a domestic farmwork force.

Changes in production since 1964 were attributed to weather conditions or, in the case of strawberries and asparagus, continuation of a long-term downtrend. The researcher believed that the farmers' being caught in a price-cost squeeze was due to capital expenditures and tax increases, rather than the rising cost of labor.

2.2.04 UNIVERSITY OF CHICAGO
CHICAGO, ILL.

GRANT NOS. 91–15–66–21
91–15–67–22

Doctoral Candidate: Frank H. Maier, Department of Economics

Sponsor: Dr. T. W. Schultz

Dissertation: An Economic Analysis of Adoption of the Mechanical Cottonpicker

Abstract: This study tested the hypothesis that the irregular pace of adoption of the mechanical cottonpicker among the 14 major cotton-producing States reflected differences in the time when growers in a State found it more profitable to use the picker than to harvest by hand. The study used data from reports by State agricultural experiment stations, the Extension Service of the U.S. Department of Agriculture, and several Federal agencies, as well as unpublished material provided by private firms involved in the development of the mechanical cottonpicker.

The researcher estimated a hypothetical starting date of profitability for each State by comparing costs of handpicking versus machinepicking for large producers. The hypothetical starting dates established by this method corresponded closely with the actual dates when adoption began. Mechanical cottonpickers first came on the market in 1948. In California, acceptance was immediate, and over half that State's production was machine picked by 1951. Adoption was slightly slower in Arizona, and more gradual yet in the mid-South. In the Southeast, mechanized pickers did not become popular until 1958.

The researcher also estimated the break-even level of yields at which the cost of handpicking versus machinepicking would be equal, determined what percentage of each State's production in each year had expected yields at or below the break-even point, and subtracted that percentage from 100 percent to estimate the "ceiling level of adoption." These estimates were consistent with his hypothesis that the more profitable a technology, the higher the eventual ceiling level of its use.

He believed his methods would be useful in analyzing the timing of the mechanization of other labor-intensive crops, once the technologies have been developed.

2.2.05 CORNELL UNIVERSITY
ITHACA, N.Y.

GRANT NO. 91–34–68–51

Doctoral Candidate: Howard G. Foster, New York State School of Industrial and Labor Relations

Sponsor: Dr. Donald E. Cullen

Dissertation: Labor Supply in the Construction Industry: A Case Study of Upstate New York

Abstract: This study described, analyzed, and evaluated the sources, development, and allocation of skilled manpower in the construction industry in four Upstate New York cities. It was based on interviews with about 70 industry representatives and questionnaire returns from about 800 construction craftsmen—bricklayers, carpenters, electricians, and operating engineers. In the analysis, two forms of labor force adjustment to changes in labor demand were distinguished—"short term" (seasonal) and "long term" (year to year).

Long-term adjustments involve questions of training, mobility, and the institutional rules and procedures which govern entry of workers into the industry. The researcher found that apprenticeship had fulfilled its function—supplying the industry with a key group of workers with a broad knowledge of their trades—better than previous studies had suggested. The number of apprentices trained was found to be largely under the control of local unions, whose decisions were greatly influenced by the prospect of seasonal unemployment among apprentices.

Unlike apprentices, most construction workers were found to enter the industry with little or no prior preparation and acquire skills informally on the job. As for rules governing entry, it was found that when jobs were plentiful, unions did not resist the employment of nonmembers.

The seasonal adjustment process which characterizes the construction industry was found to be at best imperfect. Summer workers had relatively low skill levels, and their number was limited by the small proportion of "entry-level" jobs on any worksite. However, the researcher estimated that a substantial proportion (25–40 percent) of the seasonal entrants were retained in the permanent construction work force.

Nevertheless, the researcher concluded that long-term adjustments to changes in labor demand worked more smoothly than short-term ones. Although seasonality created opportunities for some new entrants to advance rapidly, it simultaneously prevented summer employees who were not retained from systematically building up their skills.

These findings, plus a review of antiseasonal measures in foreign countries, particularly Canada, led the researcher to make several recommendations for U.S. policy. Included was establishment of a system of subsidies for winter building, geared to savings in unemployment insurance benefits.

2.2.06 FORDHAM UNIVERSITY
BRONX, N.Y.

GRANT NOS. 91–34–67–23
91–34–68–25

Doctoral Candidate: Mary Bernadette Harmeling, Department of Sociology and Anthropology

Sponsor: Rev. Joseph P. Fitzpatrick, S.J.

Dissertation: Social and Cultural Links in the Urban Occupational Adjustment of Southern Appalachian Migrants

Abstract: This study hypothesized that early adjustment of southern Appalachian migrants to urban society is facilitated by social links—Appalachian relatives and friends residing in the city—and cultural links—similarities and reciprocals between Appalachian and urban cultures.

Case studies were compiled from interviews with 51 families who had migrated from southeastern Kentucky to a northern Kentucky metropolitan county approximately 2 years earlier. The selection method identified only families with school-age children. Subjects explored in the interview included activities in employment, housing, education, religion, politics, health and welfare, purchasing, and visiting.

Evidence supported the functionalism of social links for about one-third of the migrants, especially in their initial urban employment and housing contacts. Cultural links appeared as the migrants became sufficiently established to implement Appalachian-related choices. Neither social nor cultural links, however, were directly related to adjustment, indicated by continuity of residence in the city and favorable attitudes toward urban structures.

The primary adjustment factor was employment. As long as the fathers kept their jobs and earned satisfactory incomes, nearly all of the families remained in the city. Of the 15 families that had returned to Appalachia, only one was reported as having an employable male head.

Men expressing self-confidence, job optimism, and strong work drive showed continuity of employment that was unrelated to their education, level of skill, or previous experience. The Appalachian value of independence-individualism was shown in the men's employment goals and motivation. This value also appeared as the migrants initiated other urban contacts—in the early migration phase and throughout the study period.

Employment goals and reciprocal urban opportunities thus constituted the social links. Independence, admired by urbanites, designated the cultural linkage. This value identifies the southern Appalachian family and distinguishes its adjustment from that of most American immigrants.

2.2.07 THE UNIVERSITY OF IOWA
IOWA CITY, IOWA

GRANT NO. 91–17–67–09

Doctoral Candidate: Theodore E. Newman, Department of Economics

Sponsor: Dr. B. L. Barnes

Dissertation: Labor Markets and the Supply of Labor

Abstract: This study examined the influence of wage and income differentials on the regional and industrial allocation of labor. The principal data sources were the 1950 and 1960 censuses and the Census of Manufacturers for 1958 and 1963.

The researcher found that interstate differences in the level of per capita income in 1960, in combination with the relative changes in manufacturing employment between 1950 and 1960, accounted for about three-fifths of the variance in net migration rates among States during the 1950's. The analysis substantiated earlier evidence that the level of State per capita personal income is a primary determinant of net migration. Contrary to expectations, however, the net migration rates did not significantly affect the relative changes in State per capita incomes betweeen 1950 and 1960, even when account was taken of other influences that could have upset the anticipated relationship.

Nor did the researcher find that interindustry differences in wage levels accounted for the allocation of labor among manufacturing industries. The analysis of 1958 and 1963 data for manufacturing industries (at several levels of aggregation) in the country as a whole and in Iowa showed no significant relationship between changes in production worker employment and changes in the industry's annual wage payments, whether in absolute or relative terms. The researcher could only speculate about the explanations for the finding.

2.2.08 UNIVERSITY OF MARYLAND
COLLEGE PARK, MD.

GRANT NO. 91–22–67–04

Doctoral Candidate: Rev. William J. Byron, Department of Economics

Sponsor: Dr. Paul Weinstein

Dissertation: The Applicability of the Job-Bank Concept to the Washington, D.C., Market for Domestic Dayworkers

Abstract: This research explored the suitability of a job-bank approach to providing a market intermediary between domestic dayworkers and their employers in the Washington, D.C., area. The job bank would hire applicants, find them jobs, and pay their wages as well as providing bonding, uniforms, and basic fringe benefits, making a profit from the fees charged customers for the service provided.

Using a sample drawn from the file of applications and job orders for household workers in the D.C. Employment Service office, the researcher interviewed 305 of the applicants and secured responses to mail questionnaires from 261 of the prospective employers. The local managers of temporary help service agencies and private placement agencies for unskilled workers were also interviewed.

The researcher found that both the domestic workers and the employers were dissatisfied with the conventional employment agencies and readily endorsed the job-bank concept. The workers said they would join a job-bank labor pool on a permanent, steady basis, but their work records contained little evidence of dependability or regularity. Moreover, the researcher found that, in the black ghettos where these women lived, domestic daywork was the most despised of occupations. Hence, recruiting enough women to form a stable work force would be difficult.

If the job bank were to succeed in the D.C. market, the researcher believed, it would have to provide training and, in some cases, furnish child-care facilities. Most vital, though, it would have to provide a transportation system, since public transportation to the suburbs where the employers live is either not available or unduly time consuming and costly for workers from the inner city. The costs of these necessary services for the workers could be at least partially defrayed from public funds already available for such purposes, the researcher suggested.

The researcher recommended that the job-bank concept for household workers be tested in the Washington area. By offering its employees the same employment benefits that other occupational groups take for granted, it would give some dignity to domestic daywork. Moreover, the strong and potentially expanding demand which the researcher found for the job-bank's product—an efficient dayworker, delivered to the housewife's door—augured well for success, the researcher believed.

2.2.09 MICHIGAN STATE UNIVERSITY
EAST LANSING, MICH.

GRANT NO. 91–24–66–43

Doctoral Candidate: Worth C. Summers, Department of Sociology

Sponsor: William A. Faunce

Dissertation: The Impact of Work Organizations on a Scientific Discipline

Abstract: This study explored the ways in which different work settings (in industry and government, universities, and foundations) affected scientists' participation in their disciplines. Microbiology was selected as a representative discipline, and questionnaire responses were obtained from 985 members of the American Society for Microbiology who were employed full time and whose jobs involved some research.

Participation in the discipline was measured by: (1) Attendance at national meetings; (2) attendance at conferences or symposia; (3) contacts with scientists outside the work organization; and (4) number of professional papers published.

Only the fourth measure exhibited enough consistency to have analytical value. The researcher found that scientists who published less than their school contemporaries often worked in organizations where: (1) Research was directed toward organizational or applied science ends, rather than basic scientific goals; (2) facilities for basic research were inadequate; (3) rewards for publishing were lacking; or (4) alternatives, such as administrative work or teaching, competed with research for the scientists' time. Hence, the scientists' work environment influenced their opportunity and motivation to publish. Nevertheless, the scientists' motivation to participate in their discipline appeared to be a more important influence on their participation (in all aspects) than any organizational characteristic considered.

2.2.10 MICHIGAN STATE UNIVERSITY
EAST LANSING, MICH.

GRANT NO. 91–24–66–44

Doctoral Candidate: John Pease, Department of Sociology

Sponsor: Dr. William H. Form

Dissertation: The Weberian Mine: A Probationary Analysis of Class Stratification; Being a Critical Essay on the Study of Class in American Sociology and a Suggestion for Improvement, with Special Reference to the Ideas of Max Weber, and with Some Remarks on the Speculations of Mr. Faris, Mr. Nisbet, and other Writers

Abstract: This study contends that American sociology has, but should not have, abandoned the concept of class and that Max Weber's understanding of class stratification, which has been misinterpreted by most American sociologists, offers the best vantage point for viewing the class structure of American society. In Weber's conceptual scheme specific elements such as amount of income are to be viewed in terms of their relationship to the whole; that is, in their social context.

Little attention was paid to class research until after the depression of the 1930's. Following World War II, expanding research and discussion about social stratification led to the "functional theory of stratification"; i.e., it is a mechanism that every society must have for inducing its members to occupy and perform jobs that are socially important and require training. Subsequently, with the emergence of the "mass society" theory (i.e., America is principally affluent and almost exclusively middle class), many sociologists rejected the concept of class as no longer relevant for the analysis of American society.

The author cites extensive studies to support the contention that class stratification does exist; it is consequential; it is significantly related to various aspects of social life; and it can be best understood in terms of Weber's conceptual scheme.

According to Weber, power is the essence of stratification and social stratification represents the institutionalization of unequal access to and/or exercise of power. Weber designated property and lack of property as the basic categories of class situation but further differentiated each category by the amount, kind, and stability of the individual's relationship to the production, distribution, and exchange of economic resources in the commodity, credit, and labor markets. The basic condition of class lay in the unequal distribution of opportunity or "life chance."

The author claims that most studies of poverty focus on the personal characteristics of the poor and warns against assuming that these characteristics are the main sociological explanation for why people are poor, thus neglecting economic, political, and other social structural aspects of poverty.

The author also asserts that part of the sociologists' confusion about the meaning of class stratification stems from the way the issue is researched. In choosing study populations more homogeneous in class situation than the population as a whole, researchers help perpetuate the popular but erroneous contention that American society is classless.

2.2.11 MICHIGAN STATE UNIVERSITY
EAST LANSING, MICH.

GRANT NO. 91–24–67–01

Doctoral Candidate: Lawrence E. Sneden II, Department of Sociology

Sponsor: Dr. F. B. Waisanen

Dissertation: Factors Involved in Upward Social Mobility From the Culture of Poverty

Abstract: This study identified some of the characteristics, attitudes, and activities that are linked with belief in (1) the possibility and (2) the value of upward social mobility among persons at the bottom of the socioeconomic structure. Interviews were conducted with 398 residents of Lansing, Mich., who were 17 to 29 years of age and had incomes below the poverty level.

The researcher found greater likelihood for belief in both aspects of social ascent among the poor who: (1) Evaluated middle-class persons positively, had more contacts with them, and had a desire to increase these contacts; (2) devalued contacts with lower class persons outside their immediate families; (3) were younger and/or male; (4) exhibited greater spatial mobility; and (5) made more use of the mass media in general.

According to the researcher, two variables were significantly related to belief in the value, but not the possibility, of upward social mobility: (1) Being nonwhite (one-third of the sample); and (2) watching television more often. In contrast, respondents with higher educational attainment—and a full 30 percent of the sample had completed 1 or more years of college—and those employed in full-time jobs were more likely to believe in the possibility, but not the value, of social ascent.

The researcher found no clear relationships between the orientation toward upward mobility and respondents' marital status, material possessions, alienation from their families, or perception of problems as within the individual's control.

2.2.12 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

GRANT NO. 91–24–66–22

Doctoral Candidate: James A. Sweet, Department of Sociology

Sponsor: Dr. Otis Dudley Duncan

Dissertation: Family Composition and the Labor Force Activity of Married Women in the United States

Abstract: This study examined the influence of family composition on the employment of women, using data from the 1/1,000 sample of the 1960 census on married women under 60 years of age who were living with their husbands in nonfarm locations.

The researcher found a large increase in the proportion of mothers employed when their youngest child reached age 1 and regular yearly increases thereafter until he reached age 13, when the proportion employed leveled off. This pattern was the same among white and nonwhite women, as was the greater frequency of employment among women with fewer children.

The researcher attributed the small variation in the proportion of full-time workers among mothers with different numbers and ages of children to a shortage of part-time jobs, rather than their personal preference.

According to the researcher, the probability of employment among mothers between the ages of 20 and 44 was influenced much less by their own age than by the number and ages of their children. For women over age 44 and those with no children under age 18, full-time employment decreased with advancing age.

Like age, education had little influence on whether women with children under 6 years of age were employed, the researcher found. For women with no preschool children, however, the percentage employed increased sharply with advancing educational attainment.

Husband's income exerted a stronger influence on employment of white wives with older children than on those with preschool children. Moreover, only for the very poor was there a jump in the employment rate when the youngest child reached school age.

For nonwhite women, educational attainment had little effect on the employment rate, except that the rate rose sharply for those with college educations. Similarly, the husband's income had much less effect for nonwhite than for white wives. On the whole, employment was more common among nonwhite than white women with the same education, income, and number and age of children.

2.2.13 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

GRANT NO. 91-24-68-61

Doctoral Candidate: Robert B. Athanasiou, Department of Psychology

Sponsor: Dr. Theodore M. Newcomb

Dissertation: Selection and Socialization: A Study of Engineering Student Attrition

Abstract: This study related the problem of student attrition in schools of engineering to certain personality characteristics of students who remained in engineering and those who transferred to another major field. Tests and questionnaires were administered to 713 freshmen entering The University of Michigan's School of Engineering in the fall of 1965, and to the 587 still attending the university late in their sophomore year. In the latter group, 114 students had transferred to another study area.

The researcher hypothesized that prefreshman year differences in attitudes between the engineering majors and subsequent transferees would become more pronounced with exposure to the university environment. Test and questionnaire items were grouped into indexes of: (1) Friendship (reflecting the individual's relationship to others and views of friendship); (2) professional and educational interests; (3) self-perception and personal goals; and (4) authoritarianism (indicating the individual's inclination toward categorical thinking and obedience and disinclination toward ambiguity and introspection).

Comparison of prefreshmen and sophomore scores substantiated the hypothesis. The initial gap between scores, slight on all but the friendship index, widened distinctly on all four indexes. The researcher concluded that socialization was relatively more effective than the University's selection of students in predicting attrition.

However, the test-retest scores of the engineering students revealed more change than hypothesized. Nearly 80 percent registered a lower retest score on the authoritarianism index. The researcher attributed the decrease to the liberalizing influence of a large university, the effects of recent attempts to bolster the engineering curriculum with more liberal arts courses, the seasoned student's ability to select the "right" answers on a personality test, and/or the general tendency for authoritarianism to decrease with education and sophistication.

2.2.14 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

GRANT NO. 91-24-68-62

Doctoral Candidate: Donald Alfred Sommerfeld

Sponsor: Dr. Louis A. Ferman

Dissertation: Job Training Programs in Detroit: A Comparative Study

Abstract: This study compared the effectiveness of four Department of Labor sponsored training programs in Detroit: An orientation training center operated by a private firm as part of an early forerunner of the JOBS Program; the institutional skill-training center operated by the Detroit public schools in cooperation with the State employment service; and two programs operated by the Mayor's Committee for Human Resources Development—the Orientation and Operation Mainstream phases of the Concentrated Employment Program (CEP) and a direct on-the-job training (OJT) program. Interviews were conducted with male graduates randomly selected from each program about 7 months after completion of training in early 1968, and additional information was obtained from the training staffs.

The study disclosed that the first three programs were reaching their intended target—the disadvantaged or hard-core unemployed men. OJT trainees were not regarded as being disadvantaged.

On various program features (for example, length, job preparation, job placement efforts), trainees rated CEP highest and OJT lowest. The skills center scored well on most items, but ranked below the privately operated center on counseling and job placement.

Posttraining employment rates were, as usual, highest for OJT—95 percent versus 70-to-80 percent for the other three programs. The private center placed its trainees in lower paying but higher status jobs than the CEP. Jobs of the skills center trainees occupied an intermediate position on both status and pay, and placement took longer.

Psychological measures showed that trainees with higher achievement motivation and a feeling of more control over their lives recorded greater improvements in employment after training. Those with lower motivation and a feeling of less control had about the same employment after training as before.

The researcher concluded that each program for disadvantaged trainees—unique as it was—produced satisfactory results but needed improvements. He also suggested that future programs begin with a short orientation, followed by efforts to place trainees in regular or OJT employment. In addition, he recommended a fuller exchange of information among program administrators, more followup of trainees, and the use of an "index of employability" to differentiate among the varying capabilities possessed by persons who meet the criteria which define the "disadvantaged" population that is eligible for training.

2.2.15 NEW SCHOOL FOR SOCIAL RESEARCH
NEW YORK, N.Y.

GRANT NO. 91–34–67–46

Doctoral Candidate: Thomas H. Shey, Department of Sociology

Sponsor: Dr. Deborah Offenbacher

Dissertation: The Professional Socialization of Social Work Students: How Length of Schooling, Prior Work Experience, and Other Variables, Affect Some Aspects of the Professional Socialization of Graduate Social Work Students

Abstract: This study explored some effects of graduate social work education on students' attitudes and expectations regarding their chosen field. Questionnaires were completed in 1967–68 by 320 students at five graduate schools of social work, and interviews were conducted with a number of students, faculty, and deans of social work schools.

The researcher found that on the whole the attitudes associated with professionalism were not inculcated in graduate schools of social work. In fact, students were largely indifferent to the issue of professional identification. Even the students who entered school with high ideals rapidly became oriented toward the practical exigencies of finishing the 2-year curriculum and advancing in the field. The longer students spent in school, the more disillusioned they became.

The researcher found that students were socialized as much by their previous work histories—three-fourths had held full-time jobs, mostly in social work—as by their graduate education. Altogether, 81 percent of the students asserted basic satisfaction with the field of social work.

The selection processes for entrance to graduate school helped assure ultimate satisfaction with the field. According to the researcher, the primary reason students entered graduate schools of social work was a genuine desire to help people, in conjunction with the relative ease of gaining admission and financial support. This self-selection process was reinforced by the schools' policy of recruiting persons already committed to the norms and values of the field.

The researcher recommended development of special training programs for persons with previous work experience, incorporation of undergraduate courses in social work with graduate training to form a 5-year master's program for those with no experience, and creation of training courses in select tasks (for example, housing, birth control) for persons without college degrees.

2.2.16 NORTHWESTERN UNIVERSITY
EVANSTON, ILL.

GRANT NO. 91–15–68–16

Doctoral Candidate: Philip Glenn (Teets) Cotterill, Department of Economics

Sponsor: Dr. George E. Delehanty

Dissertation: A Model of Labor in Retail Trade

Abstract: This study considered the extent to which increases in the minimum wage occasion a trade off between employment and wages in retail trade. A model of labor demand and supply was developed using data for 12 types of retail establishments in 51 large standard metroplitan statistical areas from the Census of Business for 1948, 1954, 1958, and 1963. (Minimum wage legislation enacted in 1961 affected over one-third of the nonsupervisory employees in retail trade by 1963.)

The model measured the sensitivity of labor demand in each area to increases in: (1) The demand for retail services; and (2) retail trade wages. Specific variables were annual sales per inhabitant, money wages in alternative employment (manufacturing), median education, and percent of nonwhites in the area's work force. The basic assumptions included: (1) A perfectly competitive labor market; (2) fixed and known employment opportunities in other industries; and (3) identical labor demand and supply functions for each metropolitan area.

According to the model, increases in the minimum wage have had a relatively small negative impact on employment, except in the case of variety stores. Increases in sales, averaging about 6 percent annually since 1961, have caused over-riding increases in employment. Given sales increases of this magnitude, it was estimated that retail establishments could maintain a 5-percent annual increase in employment in the face of changes in the minimum wage, ranging from a 56-percent increase for apparel and accessory stores to a 6-percent decrease for furniture stores.

The researcher noted that his model does not predict the time required for the market to adjust to changes in sales or wages, since it is based on cross-sectional data, and that it attributes actual wage changes solely to minimum wage increases.

2.2.17 UNIVERSITY OF PENNSYLVANIA
PHILADELPHIA, PA.

GRANT NO. 91–40–67–51

Doctoral Candidate: Moshe Sicron, Graduate Group in Demography

Sponsor: Dr. John D. Durand

Dissertation: Interrelationship Between the Educational Level and Occupational Structure of the Labor Force (An International and Inter-Temporal Comparison)

Abstract: This study explored the relationship between education and nine major clusters of occupations of employed persons in 45 countries for 1960 and in seven countries (the United States, Canada, Russia, Japan, the United Kingdom, Italy, and Pakistan) over several decades. Education was defined as the highest level of formal, general-purpose schooling a person completed, not including vocational or other training.

Based on the longitudinal data, the researcher found that: (1) Levels of education had increased for employees as a whole and for all occupational groups, except in Pakistan; (2) about one-third of the increase was associated with upward occupational mobility, and two-thirds with rising educational levels within occupational groups; and (3) in all seven countries the proportion of professional and other white-collar workers had risen and the proportions of farmworkers and laborers had fallen.

The 1960 comparisons included the following findings: (1) Educational levels were generally higher in countries having higher levels of income; and (2) educational variations were least for professional and technical groups and greatest for farmworkers and sales persons.

From these findings, the researcher inferred that the supply of people at various levels of education determines the level of education in each occupation to a far greater degree than employers' requirements for educational attainment. Further, the data failed to support the argument that a rising level of education spurs economic growth.

2.2.18 PURDUE RESEARCH FOUNDATION
LAFAYETTE, IND.

GRANT NO. 91–16–67–13

Doctoral Candidate: Darrell Raymond Benjamin, Department of Counseling and Guidance

Sponsor: Dr. William K. LeBold

Dissertation: A Thirty-One Year Longitudinal Study of Engineering Students' Interest Profiles and Career Patterns

Abstract: This study compared engineers' interests as college freshmen and 31 years later and related these two sets of interests to such variables as college grades, advanced study, patents, job functions and responsibilities, and salaries. Standardized versions of the Strong Vocational Interest Blank for Men (SVIB) were administered to 229 engineering graduates of Purdue University when they were freshmen in 1935 and again in 1966. In addition, 177 of the group responded to a Purdue University alumni questionnaire in 1965.

According to the SVIB test-retest, the engineering graduates' interests remained relatively stable. In general, the engineers shifted toward having more interests in common with men in managerial, personnel, and higher level occupations, and fewer interests in common with those in physical science or mechanical and business detail occupations. The SVIB scales revealed a trend toward combining scientific orientation with administrative and supervisory interests.

Interests were related meaningfully to a number of occupational and academic variables, according to the investigator. The engineers who as freshmen were interested in technical activities but not in social service or business remained primarily in technical jobs. Freshmen interests were also predictive of those who were to enter nontechnical positions. The more inventive engineers, both as freshmen and 31 years later, evinced interests similar to those of physical scientists. Similarity of interests with scientific and other highly specialized groups characterized freshmen who subsequently earned better grades and obtained advanced degrees. With regard to salaries, those ultimately earning the highest income had more interests in common with high prestige-high paying occupational groups and fewer with low prestige-low paying groups than those who earned less.

The researcher concluded that individuals, as a result of personal characteristics developed early in life, do seek out an occupation which allows for the expression of these characteristics. As a result of continuing life experiences, however, they also become very much like others in the same occupation.

2.2.19 PURDUE RESEARCH FOUNDATION
LAFAYETTE, IND.

GRANT NO. 91-16-68-35

Doctoral Candidate: Lawrence S. Zudak, Krannert School of Industrial Administration

Sponsor: Dr. Edward Ames

Dissertation: A Theoretical Analysis of the Supply and Demand for Labor in the Steel Industry

Abstract: The traditional model of supply and demand functions in the labor market and the product market was examined for the steel industry in the light of the concept of promotional sequence, or hierarchical ordering of related jobs, and crew size rules.

Production data and economic relationships were obtained from steel mills in northern Indiana. Management and labor union officials were interviewed, and collective bargaining agreements were studied for their impact on operations of the market for individual jobs.

The researcher found the traditional supply and demand model inapplicable to the steel industry and, instead, constructed a model in which wages and prices are fixed and the organization of the production process determines the relationship between labor and output.

This model reflected the industry practice whereby standard crew agreements between labor and management specify the number of each kind of workers at different levels of output. When level of output changes in response to product demand, individual workers, according to their seniority and training, shift vertically within job sequences. Thus, both the workers' and the firm's investments in human capital are somewhat protected during changes in the business cycle: the worker accepts promotion as a source of higher pay and demotion as an alternative to the costs of shifting jobs; the employer sustains a source of skilled labor, retains the workers he has trained, and minimizes labor costs when output declines.

Among implications of these findings, the investigator suggested that industrial firms' development of blacklisting, company stores, and other devices was intended to restrict horizontal mobility among workers, until union contracts achieved this end. He also noted that developing nations have neither skilled labor nor the industrial job sequences which would train workers.

2.2.20 SOUTHERN METHODIST UNIVERSITY
DALLAS, TEX.

GRANT NO. 91-46-68-43

Doctoral Candidate: Dale Bruce Rasmussen, Department of Economics

Sponsor: Dr. Finis Welch

Dissertation: Determinants of Rates of Return to Investment in On-the-Job Training

Abstract: This study examined rates of return on public investment in MDTA on-the-job training (OJT) in 24 large metroplitan areas and developed an interregional model to identify determinants of variations in the rates. The study covered about 15,000 persons who enrolled in OJT courses (including some in "coupled" courses combining OJT and institutional training) that were completed from 1964 through mid-1966. Persons who dropped out of the courses before completing training were included. A control group, matched in age, race, sex, education, occupation, and geographic division, was drawn from the 1/1,000 sample of the 1960 census.

The costs, as well as the future benefits, of the training had to be estimated. The desired data on Government expenditures and trainees' earnings were either not in suitable form or were inadequate, in the researcher's opinion.

The measure of costs included both direct costs and opportunity costs. For direct costs, Department of Labor estimates of 1965 average outlays for specific components of training (for example, classroom materials, teachers' salaries, etc., but excluding administrative costs) in relevant occupations were used. Estimates from other sources were used for the cost of allowances for training, subsistence, and transportation. For opportunity costs, the measure was the difference between trainees' earnings during training and what they might otherwise have earned. During training, earnings were assumed to be the prevailing minimum wage. Alternative earnings were assumed to be the average earnings for a worker with similar characteristics, working in the pretraining occupation in the same locality, and were estimated from 1960 census data adjusted and updated to 1965 by data from area wage surveys by the Bureau of Labor Statistics.

The basic measure of the benefits of training was the change in earnings following training; that is, expected gross earnings minus alternative earnings for the remainder of the trainees' working life (to age 65). These projections were calculated from adjusted and updated data from the 1960 census for persons of similar characteristics and employed respectively in the posttraining and pretraining occupations, assuming that the workers' future unemployment experience would parallel their past.

From these data, three different rates of return were estimated to reflect the following assumptions: (1) That transfer payments such as training allowances were not a cost to the Government, because the money could have been allocated to alternative uses; (2) that transfer payments were a cost (adjusted for unemployment insurance or welfare payments foregone by trainees); and (3) that transfer payments were a cost, but only increased tax revenues (not the entire increment in earnings) counted as a benefit of training. In computing the rates of return, the discounts employed were such that the sum of the costs of training and the benefits of training, subject to adjustments in costs or benefits depending on the estimating assumption, would equal zero.

According to calculations based on the first assumption, the researcher found investment in OJT quite profitable, except in Portland, Ore., and Detroit, where the amount of skill upgrading was insignificant. The rate of return ranged from zero in Portland to 167.4 percent in Miami, and was 30.0 percent or more in 14 of the 24 areas. When transfer payments were counted as a cost (assumption 2), no predictable changes were apparent, because the increased cost of allowances was sometimes more than offset by savings in unemployment insurance and welfare payments. Reliance on the third assumption drastically reduced the rates of return, which ranged from zero to 19.9 percent.

From the model which was constructed to explain the different rates of return among the 24 areas, the researcher estimated that a 10-percent increase in area population or skill differentials in wages would raise the rate of return by about 6 percentage points under the first estimating assumption. The rate would rise by 10 points with a 10-percent increase in the percentage of nonwhite trainees and fall by 10 points with a 10-percent increase in the percentage of manufacturing in the area's total employment. The researcher regarded these estimates as subject to verification through further research.

2.2.21 UNIVERSITY OF WASHINGTON
SEATTLE, WASH.

GRANT NO. 91-51-66-54

Doctoral Candidate: Stephen Edward Baldwin, Department of Economics

Sponsor: Dr. J. B. Gillingham

Dissertation: The Impact of Governmental Programs on the Employability of Youth in the Seattle Labor Market

Abstract: This study explored the assimilation of young persons into the labor force and sought to assess the assistance provided them by a number of governmental programs. During the summer of 1967, interviews were conducted with a sample (half men, half women) of 140 Negroes, 41 Chinese and Japanese Americans, and 109 whites between the ages of 18 and 21 who had attended a Seattle high school. More than half of the whites and Chinese and Japanese Americans (grouped together in this analysis) and one-fourth of the Negroes were still classified as students.

Although the Seattle labor market was exceptionally tight at the time, 31 percent of the Negro men and 20 percent of the Negro women were unemployed, in contrast to 13 percent and 7 percent for white men and women, respectively. The Negro youth (both sexes) had completed significantly fewer years of schooling and had lower records of scholastic performance than the whites interviewed.

The distribution of youth among occupational and industrial sectors was roughly the same as the entire local labor force, although their jobs were primarily entry level and frequently in the trade and service sectors. The occupational goals of respondents appeared consistent with their educational and family backgrounds.

The researcher found that respondents' average earnings in the preceding year were low, primarily because of part-time or part-year work, rather than low wages. Although the wage rates of men from poor families were significantly lower than those from nonpoor families, no such difference was observed among the women.

Jobseeking through formal methods—employment agencies, newspaper advertisements, and governmental programs—was more common among Negroes than whites and produced one-fourth of the first and most recent jobs held by all respondents. Pay was lower on the first jobs found by these methods than those found through friends and relatives or by direct application, but the wage disadvantage did not persist in subseqent jobs.

Just over half the respondents (and more Negroes than whites) had some contact—largely job placement—with youth-related agencies, primarily the Washington State Employment Service, the Seattle Youth Opportunity Center, and the Neighborhood Youth Corps or through high school counselors and teachers. Clients of the Government programs experienced substantially higher unemployment rates than other youth. The researcher thus concluded that the programs were reaching the more disadvantaged, but were unable to compensate completely for their disadvantages. On the whole, the researcher considered the respondents less successful in labor market assimilation than expected in a full employment economy.

2.2.22 THE UNIVERSITY OF WISCONSIN
MADISON, WIS.

GRANT NO. 91–53–68–21

Doctoral Candidate: S. Muthuchidambaram, Industrail Relations Research Institute

Sponsor: Dr. Gerald G. Somers

Dissertation: Determinants of Income in the Madras Labor Market

Abstract: This study investigated variables influencing income in the Madras, India, labor market and drew comparisons with Japan and the United States. In 1964, questionnaires were administered to a sample of 501 male, nonsupervisory, blue-collar workers at two medium-size manufacturing firms in Madras. Information obtained concerned income (monthly earnings before deductions), age, years of education, payroll status (permanent or temporary), hours worked per month, total weeks employed and unemployed from 1955 to 1964 (experience), vertical job mobility, geographic mobility, union membership, degree of skill, residence in Madras, institutional or on-the-job training, and caste membership.

The researcher found that the combination of all these factors explained only one-third of the variations in income, but five of the variables were positively and significantly related to income: Education (the sample mean was 7 years), permanent payroll status, experience, institutional training, and skill. Skill was the single most important factor in income determination, and explained 20 percent of all variations. The researcher conjectured that two-thirds of individual income variations must be explained by such factors as ability, effort, motivation, quality of training and education, nonwork experience, and employers' size and control over the market.

The Madras results contrasted sharply with data from a parallel study in Japan, where experience dominated all other variables, and the combination of all factors explained 74 percent of the income variations. In a nearly comparable study of American heads of households, education emerged as the single most powerful income determinant, and, as in Madras, only one-third of the income variations were explained by the variables measured.

The researcher concluded that for blue-collar workers in the manufacturing sector, education was a key variable in determining income directly, and indirectly as it contributed to levels of training and skill. Thus, he considered education a necessary, though not sufficient, condition for the economic growth of India.

2.2.23 YALE UNIVERSITY
NEW HAVEN, CONN.

GRANT NOS. 91–07–66–19
91–07–68–11

Doctoral Candidate: Robert S. Goldfarb, Department of Economics

Sponsor: Dr. Mark W. Leiserson

Dissertation: The Evaluation of Government Programs: The Case of New Haven's Manpower Training Activities

Abstract: This study evaluated the adequacy of cost-benefit techniques for analyzing manpower training programs and developed a different method of evaluating program effectiveness. Study of the new method was based on interviews with 292 participants in MDTA institutional and on-the-job training programs in New Haven, Conn., between 1964 and 1966. In addition, interviews were conducted with 56 employers participating in the OJT programs and 18 large area employers.

The researcher found three major deficiencies in cost-benefit analysis for judging manpower programs: (1) The method fails to take into account a number of returns from training (such as increased employability of the trainee, increased stability of his family, and reduced probability of violent crime in the community) which can neither be measured nor priced adequately; (2) it may not correctly measure income, the major quantifiable benfit, because the control group against whose performance trainees were compared is often deficiently matched to the trainee group; and (3) it takes no account of improvements that are likely to be made in relatively new programs as experience accrues.

The researcher recommended program analysis through examination of the process of training and consideration of training as a combination of services intended to counteract specific causes of unemployment and underemployment. Using this approach, he found that the greatest employment and income gains connected with institutional training programs resulted from the acquisition of a scarce, hard-to-learn skill or from applicants for training being shifted, through the program's counseling and placement activities, from low-wage, low-demand occupations to high-wage, high-demand occupations—often without needing skill training. The researcher also found that training might be superfluous when large employers insist on hiring reliable persons, not necessarily those trained to fill their semiskilled jobs.

According to the investigator, the wage gains made by many participants after on-the-job training actually resulted from the trainees' unusually low wages before training. Because those who completed little OJT also made these gains, the researcher questioned the necessity of training subsidies for employers. However, the researcher found justification for training in the fact that the highest posttraining wages were paid to those program participants who had received training in specific skills.

In comparing OJT and institutional training, the researcher decided that the latter served better those groups needing complex skill training, while OJT was more appropriate for individuals who lacked both skills and employment reliability. Although OJT was less costly to the Government, the investigator found serious deficiencies in the funding agency's ability to control the shape and content of the program.

The investigator recommended careful selection of employers to run OJT programs so that the skill training and/or job discipline training (for persons with unreliable job habits) would be provided as intended. He also suggested that the funding agency supervise recruitment and selection of trainees and follow up periodically on their progress. For institutional training, he proposed that mediators be employed to follow up on trainees after placement and to communicate between them and their new employers.

3

2.3 PROJECTS COMPLETED, JULY 1, 1968–JUNE 30, 1969—Research Project Grants Under the MDTA

2.3.01 THE AMERICAN UNIVERSITY
WASHINGTON, D.C.

GRANT NO. 91–09–69–05

Principal Staff: Dr. Nancy Barrett, William Carter, Charles McClenon, Stuart Smith, and Robert Wolpert, The Institute for Creative Studies [5]

Report Title: Pretraining Vocational Orientation Through Job Rotation

Abstract: This study proposed solutions to the problem of participants' dropping out of MDTA training programs. The most common reason trainees cited (in other studies) for leaving their programs, acceptance of job offers, seemed to the researchers an alternative which should be facilitated by measures within the training program: (1) Provision of a placement service for all trainees; (2) periodic assessment of each trainee's employability so that the trainee could be advised on the desirability of his leaving the program at a particular time; and (3) program administrators' encouragement to businesses to hire suitable trainees before program completion.

To alleviate financial pressures during training, another common reason for dropping out, the researchers proposed such actions as shortening the training programs and making loans available to trainees. For training-related problems, the researchers recommended increased counseling attention for each trainee.

The researchers suggested that a common, though unarticulated, reason for dropping out lay in the limited amount of vocational counseling given to young people before they enter training programs. To alleviate this problem, they proposed a rotational on-job-exposure program. This program would allow youth lacking a specific vocational goal to spend 1 or 2 weeks learning what is involved in one or more occupations by assisting workers in those occupations. Once the participant decides he is interested in an occupation, he would be placed directly in an appropriate job or would go through a training program before placement.

2.3.02 UNIVERSITY OF CALIFORNIA, BERKELEY
BERKELEY, CALIF.

GRANT NO. 91–05–67–60

Principal Staff: Dr. Lloyd Ulman, Dr. Margaret S. Gordon, and Dr. Margaret Thal-Larsen, Institute of Industrial Relations

Report Title: A Study of Employment Agencies and School Placement Services in a Large Metropolitan Labor Market Area—Planning Phase

Abstract: This study laid the basis for exploring: (1) The impact of nationally emphasized manpower programs on the roles and effectiveness of public and private employment agencies and placement services; and (2) the relationships between employment agencies and educational institutions, with reference to the development, transmission, and use of information on occupational changes, particularly for educational policy and vocational education planning.

Two interview schedules were developed in preliminary form. The first was designed for gathering information on the scope, organization, staff, procedures, goals, and effectiveness of public and private employment agencies and placement services in the San Francisco Bay area.

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[5] The Institute for Creative Studies brings together genius-level college students from various disciplines to work on practical problems during their summer vacations, under supervision of a faculty member.

The second interview schedule was designed for practicing counselors in public and private high schools and junior colleges in the Bay area. It covers the setting in which vocational education counseling and guidance is provided, resources devoted to counseling, procedures followed, and counselors' evaluations of the labor market information now available to them and information most needed by them.

These interview schedules are being tested and the full-scale project is conducted under a Manpower Administration contract (see **1.1.06**).

2.3.03 CENTRAL WASHINGTON STATE COLLEGE
ELLENSBURG, WASH.

GRANT NOS. 91-51-66-51
91-51-68-39

Principal Staff: Dr. Clayton C. Denman and Anne Smith Denman, Department of Political Science/Anthropology

Report Title: Ethnic Differences and Historical Change in the Manpower Resources of a Small Town

Abstract: This study examined attitudes toward work among residents of Cle Elum, Wash., where the population of 1,800 represents a variety of ethnic groups. Since its coal mines closed and local railroad operations were curtailed, the community has been "economically depressed." Interviews were conducted with local business owners and managers, employees, retired persons, and high school seniors.

The most significant disparity in attitudes, the researcher found, was not attributable to ethnic differences but to age differences. Persons up to age 18 made up about 25 percent of the population; persons over 60 years of age, 20 percent. Despite older residents' desire to maintain community stability, children were encouraged by parents and urban-oriented teachers to obtain an education which was available only outside the community (usually in an urban environment) and which often prepared them for jobs nonexistent in the town. Thus, the children were being raised to prefer life styles which would not readily fit into the community.

The problem of social discontinuity was being intensified by economic disruptions. Job openings were frequently filled by newcomers from the cities who brought with them both social and economic patterns different from those of long-time residents. Newcomers' preferences for different goods and services—for example, supermarkets instead of small grocery stores—were contributing to the failure of small businesses, on which older residents depended. Furthermore, as the older people died, the patronage of small stores was diminishing so that the stores usually closed when the proprietor retired. Moreover, a half century of uncertain employment in the coal mining industry had accustomed residents to life styles of periodic unemployment and frugal living as the only defense against change from outside the community. In contrast, newcomers were generally oriented toward change. They were usually the community leaders and promoters of the town as a location for industry and investment from outside.

The researcher concluded that residents of Cle Elum must plan for the future while attempting to minimize disruption of past social and economic patterns. A new economic base could be developed by introducing basic industry and exploiting the tourist industry growing nearby. The old residential area should be closed down gradually (or rebuilt for tourism) as its residents die or relocate, and a new residential area should be built.

To achieve such changes, the researcher suggested an educational program aimed at demonstrating to long-term residents how internal community action does effect change and at involving young people in the future of their town.

2.3.04 CORNELL UNIVERSITY
ITHACA, N.Y.

GRANT NO. 91-34-67-48

Principal Staff: Dr. William H. Friedland and Dorothy Nelkin, School of Industrial and Labor Relations

Report Title: Field Research in Migrant Labor in New York State

Abstract: This project—part of the Cornell Migrant Labor Project—carried into its second year a pilot study (under a previous grant, **3.3.06**) to explore the social organization of migrant labor. This part of the study analyzed the relationships of growers to their migrant labor crews and the consequences for the migrant social system. It was used to teach undergraduate sociology students about migrant labor as a social system and about methods of social research. The field work was done in the summer of 1967 by eight undergraduates from Cornell and three from Tuskegee Institute who were placed in 10 migrant labor camps in New York State as participant-observers.

In the camps studied only a few growers were deeply concerned with managing the migrant work force. Most of them abdicated this responsibility to the crew leaders, who were found to be inefficient, unproductive, and exploitative. Work organization was haphazard, supervision erratic, and planning negligible. Regarding supervision of the living conditions of the workers in the migrant camps, the growers exhibited even less concern.

Because of the lack of grower involvement, the researchers found that the social organization of the crews was also haphazard, depending largely on the leadership style of the crew leader. The crews had virtually no internal structure or stratification, and there was little basis for the crystallization of status within the crew. Upward mobility depended on random features irrelevant to work organization, rather than skill. Thus, there was almost no predictable way a worker could better himself within the system.

To help overcome these problems, the researchers made several tentative suggestions for developing structural patterns. If the variety of jobs requiring different degrees of skill (such as driver, grader, weigher) were assigned objectively rather than on the whim of the crew leader, a secondary stratum would be created. Migrants could be taught to operate farm machinery to further increase differentiation. Differentiating mechanisms might also be introduced in the camps; for example, variation in housing with different rental charges.

2.3.05 HARVARD UNIVERSITY
CAMBRIDGE, MASS.

GRANT NOS. 91–23–68–06
91–23–68–50

Principal Staff: Penny H. Feldman, David M. Gordon, Michael Reich, and Dr. Peter B. Doeringer (ed.), Department of Economics

Report Title: Low-Income Labor Markets and Urban Manpower Programs: A Critical Assessment

Abstract: This project was planned as a descriptive appraisal of Boston's Concentrated Employment Program (CEP). Using data on file at the local CEP operating agency, the researchers studied a sample of 450 applicants for employment between September 1967 and March 1968—roughly the second 6 months of operation. They also interviewed agency staff members, program subcontractors, collaborating government agencies, and private organizations.

The researchers found they could not reconcile their analysis of the data with the philosophy of ghetto labor market dynamics which underlies the CEP. The CEP assumes that services to overcome ghetto residents' employment handicaps, such as inadequate education or training, will increase the individuals' productivity and enable them to compete effectively in the labor market. However, the CEP applicants studied were not perpetually unemployed and unemployable; a number of them had reasonably adequate education and skill training. Their principal problem seemed to be employment instability—frequent job changes and movements into and out of the labor force—as they voluntarily left the low-paying, menial jobs typically available to them. Hence, the researchers concluded that a measure of employment instability would be a better index of need than the deficiency of skills and education.

To explain the types of jobs available, individual members of the research team suggested different theories of low-wage urban labor markets: (1) That labor demand falls into primary and secondary segments, the latter containing unstable, low-wage, dead-end jobs available to the ghetto labor force; (2) that employment stability is directly related to the availability of preferred jobs; and (3) that just as the most qualified workers and the best reputed employers are matched, the least acceptable workers and the least attractive jobs are also matched.

They found the employers most likely to cooperate with the Boston CEP on a continuous basis to be those experiencing difficulty in attracting new employees, and often offering low-wage jobs. Yet placement officers generally made referrals even to these jobs in the belief that they were better than no job at all. Nearly half of the applicants sampled were referred to jobs, whereas less than one-third were referred to training or special work programs. (Many of the nonreferrals were seeking part-time employment and/or receiving welfare payments.) About one-third of the first referrals to jobs resulted in placement, one-third in employers' rejections, and one-third in applicants' refusals.

Thirty-eight percent of the persons placed directly in jobs were still on those jobs 1 month later, and half of these were there 6 months after placement. According to the researchers, the CEP clients (6 months after job placement) had not obtained or retained significantly better paying jobs than a control group (made up of CEP applicants who had not been referred to jobs or had not been hired after referral), although a greater percentage of the CEP clients were employed at the time. The retention rate of CEP-training graduates placed in jobs was somewhat higher than that of regular applicants placed directly in jobs.

The researchers' recommendations included the following:

1. Shifting the emphasis of urban manpower strategy from the supply to the demand side of the labor market by opening preferred employment to the disadvantaged, as is now being attempted under the Job Opportunities in the Business Sector (JOBS) Program, or by upgrading less preferred jobs.

2. Changing the operation of CEP centers in order to: Decrease emphasis on the volume of referrals and placements; discourage referrals to low-wage jobs; concentrate on job development; and give preference to applicants with histories of great employment instability and large families.

3. Establishing agencies to refer disadvantaged individuals to part-time and temporary job vacancies. These agencies could serve the pool of potential part-time workers in the ghetto, it was suggested, while circumventing employer reluctance to hire the disadvantaged as permanent, full-time employees. The agency could furnish skill training to interested clients on days when referrals were not available.

4. Developing further theories of ghetto labor market dynamics, with focus on job turnover behavior, the impact of fluctuations in national economic conditions, and the mechanics of the illicit ghetto labor market.

2.3.06 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

GRANT NO. 91–24–68–37[6]

Principal Staff: Gordon Barhydt, Institute of Labor and Industrial Relations

Report Title: Feasibility Study of Centralized Information Services in Industrial Relations

Abstract: This study examined the industrial relations information available at the libraries of 14 industrial relations institutes, ascertained scholars' and professionals' needs for this information, and assessed methods for processing and disseminating the information. Data were collected at the libraries and in interviews with 52 institute faculty and staff members and professionals in labor organizations, universities, private industry, and government agencies.

The researcher identified a core of 131 heavily-used, basic journals and serials, government periodicals on labor and economics, and association reports and publications. Library resources satisfied the general informational and statistical needs of individual researchers, except for local and other highly specialized data. Professionals outside the institutes, however, expressed difficulty in obtaining even basic information. Several shortcomings were discerned in the commonly used indexing services: (1) Failure to cover the entire core of industrial relations information; (2) a lag of 6 to 12 months between publication of material and its indexing; and (3) inconvenient structure or presentation of materials.

The researcher concluded that the information core could be more effectively and efficiently processed and disseminated by a centralized information service. As a result, a comprehensive information system is being developed and brought to a fully operational level under partial support from a Manpower Administration grant (see **1.4.08**).

2.3.07 UNIVERSITY OF MINNESOTA
MINNEAPOLIS, MINN.

GRANT NO. 91–25–67–10

Principal Staff: Dr. Herbert G. Heneman, Jr., and Dr. George Seltzer, Industrial Relations Center

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[6] Most financial support for this study was provided by industrial relations centers at 14 universities.

Report Title: Manpower Planning and Forecasting in the Firm: An Exploratory Probe

Abstract: This pilot study of the extent and nature of manpower forecasting was based on a questionnaire sent to most Minnesota firms with over 500 employees, of which about two-thirds (69) responded. In addition, case histories were obtained in interviews with 25 of the firms that made forecasts.

Of the 69 firms responding, 50 (or 72 percent) made forecasts of some or all of their manpower requirements and half as many forecast external labor supply. Forecasting of requirements was more prevalent in nonmanufacturing than in manufacturing industries and in large than in small firms.

Sales and internal labor supply were most often considered in forecasting requirements, by 62 and 45 percent of the firms, respectively. Only 17 percent considered technological and administrative changes 17 percent, new products; and 36 percent, facilities expansion. The external labor supply was a factor for 28 percent and turnover for 19 percent. Only 20 percent considered forecasts prepared outside the organization.

All employee groups were covered by forecasts in 34 percent of the companies. Forecasts were limited to managerial and administrative employees in 22 percent, and the remainder showed no clear forecasting procedures on occupational patterns.

Nine of every 10 forecasts of requirements were used in recruiting. Only about 1 in 3 were used in planning budgets, training, and transfers and promotions. Forecasts covering at least 5 years were more often used for nonrecruiting purposes, suggesting that short-range forecasters may not emphasize developing manpower resources within the firm.

Only 3 of the 25 firms interviewed regularly checked the accuracy of their forecasts. Most of the others believed that the rate of error in 1- or 2-year forecasts did not exceed 5-10 percent; in 3- to 5-year forecasts, 15-25 percent. However, where forecasts were used as a control device (for example, wage and salary costs), ". . . it is quite possible that an artificial type of . . . accuracy is involved." The experience of those companies that had participated in the Area Skill Survey in November 1963 suggested that ". . . only when employment levels change can manpower forecasting activities be demonstrated to be superior to a naive projection."

The researchers concluded that the establishments' current forecasting techniques were inadequate and that intensive research into such techniques is needed before the problems of manpower planning can be addressed.

2.3.08 THE RESEARCH FOUNDATION OF STATE UNIVERSITY OF NEW YORK

ALBANY, N.Y.

GRANT NO. 91–34–67–07

Principal Staff: Dr. Haskel Benishay, Department of Finance and Management Science

Report Title: Development of Stochastic Labor Force and Working Life Models

Abstract: The researcher developed a model capable of dealing with both numbers of occurrences in a period of time and amounts of variables characterizing these events. The model takes into account the random number of new occurrences in a time series, the size of each occurrence, and the random life of each occurrence. On the basis of the model, certain characteristics of the next event to reach the end of its existence can be predicted, and a number of comparisons can be drawn among occurrences over time. The researcher suggested the model could be used in analyzing such time series as those on trade credit, consumer credit, and demand deposits of commercial banks.

The researcher was able to improve the model so that it could handle both labor force participation and employment. The model treated labor force behavior (for persons alive a certain period after birth) as phenomena of multiple entries into and retirements from both the labor force and the state of employment. Accessions were assumed to occur concurrently with retirements.

2.3.09 NORTHEASTERN UNIVERSITY

BOSTON, MASS.

GRANT NO. 91–23–67–49

Principal Staff: Dr. Jack Ferguson and David Grafstein, Department of Sociology and Anthropology

Report Title: A Pilot Study of Urban Career Patterns

Abstract: This pilot study explored individual career patterns in terms of job changes, occupational mobility, and factors leading to specific career decisions. Interviews were conducted with 214 heads of households living in a racially and ethnically diverse, primarily low-income neighborhood of Boston, where young professionals had begun to settle.

The researcher found greater occupational mobility between sons' first jobs and fathers' present jobs than between sons' first and present jobs. Although educational attainment was the primary determinant of upward mobility in the first comparison, it had more limited impact on the sons' upward mobility during their careers. Present jobs were found to be highly associated with patterns of mobility: a large percentage of professional and other white-collar workers were either upwardly mobile or static (already in the top occupational category), and a majority of manual workers had moved downward during their careers.

Those who made no decisions on future jobs (they were promoted, laid off, or fired) were as likely to move upward occupationally as those who were oriented toward the future in their job decisions. Persons who considered only the undesirability of their present jobs in deciding on a new job were more likely than the others to move downward.

The most highly educated were found to be the most likely to return to school after beginning full-time work. Over 60 percent of the college graduates took further training, compared to 51 percent of high school graduates and 21 percent of those with less than high school diplomas. Although further training had uniformly beneficial effects on upward mobility from the first to the present job, it offered the greatest benefit for those who had begun working in lower-status occupations than their fathers' present positions. The researcher thus recommended that workers with less than high school diplomas be encouraged to continue their education in order to spur their upward mobility. Furthermore, he proposed training during the early high school years on rational ways of making job decisions.

2.3.10 NORTHEASTERN UNIVERSITY
BOSTON, MASS.

GRANT NO. 91–23–67–57

Principal Staff: Dr. Morris A. Horowitz and Dr. Harold M. Goldstein, Department of Economics

Report Title: Hiring Standards for Paramedical Manpower

Abstract: This pilot study tested the hypothesis that hospital hiring standards for paramedical jobs exceed the education, training, and experience needed for the duties performed, thus making it difficult to fill the jobs. Information was obtained from administrators and personnel directors of 20 general and special short- and long-term hospitals in the Boston area. A sample of 524 hospital employees in 22 paramedical occupations were asked whether they performed each function on a list developed for their occupation (in consultation with specialists in the field) and how much for their worktime it consumed. They were also asked about their education, training, and experience and its relevance to their duties, and about their career prospects.

The researchers found that: (1) Published descriptions of paramedical occupations were incomplete and often wrong for workers in the study; (2) many hiring standards had been in effect for years despite changes in job content and widespread shortages of workers, but most of the hospital executives felt their hiring standards were "just right"; (3) employees working in different occupations and having widely differing qualifications were performing the same or similar functions—in some instances within the same hospital. For example, the same eight functions accounted for 80 percent of the nurse aids' time and 63.5 percent of licensed practical nurses' time, although most of the latter group had at least 15 months of occupational training after high school, whereas many aids were school dropouts with no more than a few weeks of informal, on-the-job training; and (4) in comparison with the rest of the sample, educational requirements appeared to be lower and training time shorter for medical corpsmen at the U.S. Naval Hospital than for civilian hospital staff (12 versus 24 months for training an X-ray technician, for example), but most corpsmen easily found moonlighting jobs in civilian hospitals.

The author's recommendations included: (1) Use of the job descriptions and lists of functions developed for the study for further research on the education and training needs in paramedical occupations; (2) realistic appraisal of the job requirements of each occupation and establishment of relevant hiring standards (including licensing requirements) and training programs (on-the-job as well as institutional); (3) better use of highly trained workers; and (4) hiring and training more aids and assistants, including high school dropouts, who should then be trained on the job for the higher rated occupations.

One of the hospitals included in the study has consented to participate in further research for designing and implementing a plan to effect these recommendations (see **1.5.24**).

2.3.11 UNIVERSITY OF OREGON
EUGENE, OREG.

GRANT NO. 91–39–68–17

Principal Staff: Dr. Steven E. Deutsch, Department of Sociology

Report Title: Local Union Leadership and Technological Change

Abstract: This study explored local union leaders' perceptions of automation, and their attitudes toward union and government responses to automation. Surveys were conducted among leaders representing a broad range of industries in two diverse regions: Honolulu (168 interviews), and 15 industrial centers in Ohio (349 interviews).

The researcher reported that a majority of union leaders believed automation was seldom in the workingman's interest, although it did not necessarily mean that men would be laid off. However, a majority did not feel unions were justified in striking against companies that wanted to automate, or that unions should have veto over installation of automated machinery. For workers laid off by automation, more union leaders believed that government, rather than the company and union, should offer such assistance as moving expenses and retraining. In general, union leaders in Hawaii were somewhat more committed than those in Ohio to union responsibility for mitigating the effects of automation.

The researcher found the following variables had significant impact on local union leaders' perception of automation as a threat or provocation for militant behavior: (1) Previous negative experiences with automation; and (2) race (Negroes—interviewed in Ohio only—considered themselves particularly vulnerable to unemployment resulting from technological change). Other factors not significantly related to these perceptions were: (1) Alienation from work; (2) political liberalism; (3) age; and (4) union membership among immediate family members.

Among implications of the findings, the investigator noted the following: (1) Despite a continuing commitment to the unions' traditional role of improving economic rewards through collective bargaining, union leaders seemed to recognize the failure of unionism and union-management relations to cope with such problems of technological change as retraining and relocation of redundant workers; and (2) automation appeared to be contributing to racial cleavages.

2.3.12 PURDUE RESEARCH FOUNDATION
LAFAYETTE, IND.

GRANT NO. 91–16–67–43

Principal Staff: Dr. Carolyn Cummings Perrucci, Department of Sociology

Report Title: The Female Engineer and Scientist: Factors Associated with the Pursuit of a Professional Career

Astract: This study examined several factors thought to influence women's recruitment into and pursuit of careers in engineering and science. The data used, collected for an earlier study, described 3,589 Purdue University alumni who graduated between 1947 and 1964 with bachelor's, master's, and doctoral degrees in 11 engineering subgroups and four science subgroups. All living women engineering graduates were contacted, for a total of 300 women respondents.

The researcher found few differences between men's and women's social and educational backgrounds. In employment experiences, however, major disparities occurred. Initial positions were relatively similar in technical and supervisory responsibility, but the men earned more than the women. The 38 percent of the women respondents employed in 1965 had advanced somewhat, but on the average held less responsible and lower paying jobs than the men who had begun working at the same time. The researcher considered this growing disparity during the career a potential deterrent for women who might consider entering the fields of engineering and science.

The researcher discerned some adaptations to the career role in marriage and childspacing patterns of women engineers and scientists. Of the respondents, 18 percent never married. Of the women who married, over half had worked for at least 1 year before marriage, and then the majority waited up to 2 years before beginning families. Among the older women who had worked more than half the time since their graduation, this childspacing pattern was especially pronounced: 37 percent waited 4 or more years after marriage before bearing their first child, compared to 18 percent of the younger career women.

The researcher explored the possibility that technical knowledge grows obsolete during extended periods of unemployment (due to illness or childbearing) and that women are thus discouraged from returning to their professional careers. The older women who had worked less than half the years since their graduation reported more obsolescence in their knowledge of college subject areas then younger women and all men. However, similar percentages of men and women of equal education reported lack of knowledge of emerging fields within engineering and science: the women were more likely to be out of date in engineering areas; less likely, in biological science areas.

2.3.13 SONOMA STATE COLLEGE FOUNDATION
ROHNERT PARK, CALIF.

GRANT NO. 91-05-68-31[7]

Principal Staff: Dr. Cheryl J. Petersen

Report Title: The California Farm Labor Force: A Profile—A Report Prepared for the Assembly Committee on Agriculture by its Advisory Committee on Farm Labor Research With the Assistance of the California Department of Employment

Abstract: This study analyzed the results of a comprehensive survey of the California farm labor force, based on interviews with a 1-percent random sample of the 486,700 workers with farm earnings of more than $100 in 1965, and questionnaires to their employers (in nonfarm jobs as well as farm jobs). Since the study covered 1965, it reflected initial adjustments to the termination, at the end of 1964, of Public Law 78, which had authorized temporary contract employment of Mexican nationals to meet domestic farm labor shortages. It attempted to distinguish between the core of "professional" farmworkers and the short-term workers or those only loosely attached to the farm labor force.

Some 46 percent of the sample were persons of Mexican heritage and 44 percent were Anglos. Over one-fifth were women. Somewhat more than half were either heads of households or lived alone. One-sixth were 55 years of age or older, and three-eighths were under the age of 25. About half had 8 or fewer years of schooling, and one-sixth were still students.

Median annual earnings for farmwork were $763, with the women having a median of $464 and students, $443. For the sample group as a whole, other work raised median total earnings in California to $1,388.

Nearly three-fifths of the sample had farm earnings of less than $1,000, and about two-fifths reported total earnings in this range. Some 56 percent of the workers in this income class were short-term workers (out of the labor force for more than half the year). Most of these short-term workers were women or students. Another 14 percent were migrants, most of whom probably had additional out-of-State earnings. But 30 percent of this income group were in the labor force more than half the year.

About 75 percent of the total sample were in the labor force 27 weeks or more during 1965, but only 41 percent were fully employed that many weeks. These farmworkers were considered professionals, but their skills were not highly specialized. Only 14 percent of the total sample had full-time year-round work—usually in nonproduction work (e.g., truck driving, maintenance, clerical work). Over three-fourths of the sample had only part-time employment during some weeks. Almost as many experienced at least 1 week of unemployment, with about one-third reporting at least 15 weeks of unemployment.

Migrant workers comprised about 30 percent of the California farm labor force. Their earnings were significantly higher than the overall average, and they usually had more weeks of employment. Over half of the migrants were Mexicans; one-third were Anglos; nine-tenths were men.

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[7] This study was undertaken at the request of the California Legislature Assembly Committee on Agriculture by its Advisory Committee on Farm Labor Research. The California Department of Employment planned and conducted the study, under a grant from the U.S. Department of Labor's U.S. Training and Employment Service, and the data were analyzed under this Manpower Administration grant.

Four-fifths of the sample worked in only one area (including some of the migrants), two-fifths worked for only one employer, and three-fifths worked on only one crop. These groups included many students, housewives, and other residents of rural communities who worked on a farm only during peak periods. Their earnings were lower than those of workers with more varied employment experience.

The researcher suggested that the lack of organization in the farm labor market might contribute to the chronic unemployment which kept median earnings low. Three-fourths of the farm jobs held by the workers were obtained either by direct application to the growers or through friends and relatives. Less than 10 percent were obtained through the Farm Labor Service of the Department of Employment. Crew leaders and contractors were the source of 12 percent of the jobs; growers' associations and unions were the source of the few remaining jobs. These workers obtaining jobs through these last four sources had significantly higher median earnings.

2.3.14 SOUTHERN ILLINOIS UNIVERSITY
CARBONDALE, ILL.

GRANT NOS. 91–15–66–34
91–15–67–50

Principal Staff: Dr. Herman R. Lantz and Dr. Ernest K. Alix, Department of Sociology

Report Title: A Study of the Relationship Between Resignation and Performance in a Job Retraining Program [8]

Abstract: This study developed a scale to measure resignation, then analyzed the relationship of resignation to willingness to participate in a retraining program. The researcher defined resignation as a preference for the status quo and limited opportunity for change, so that the potential for failure and disappointment is reduced. A sample of 765 persons who walked into an MDTA center for retraining information in West Frankfort, Ill., between late 1964 and mid-1967 responded to a series of statements which had been ranked by a panel of social scientists according to degree of resignation. The subjects' responses were related to their demographic characteristics and their decisions on whether to sign up for the program.

After concluding that resignation could be measured, the researchers found that: (1) Subjects who signed up for retraining programs were more often low in resignation than those who had not; (2) all groups tested showed evidence of resignation, but the most highly resigned were unskilled single men with limited education and from large families; and (3) even highly resigned groups made some effort to overcome their inertia.

Based on these findings, the researchers suggested that current retraining programs should evaluate their assumption of a rational man, who responds easily to economic incentives. They also recommended development of a government-financed program to allow resigned persons to experience success in fulfilling their economic goals in a sheltered industrial situation.

2.3.15 TEMPLE UNIVERSITY
PHILADELPHIA, PA.

GRANT NO. 91–40–68–08

Principal Staff: Dr. Karen S. Koziara, School of Business Administration

Report Title: Labor Force Nonparticipation of Males in Urban Poor Areas

Abstract: This study compared economic and social characteristics of a sample of 24- to 54-year-old men who were and were not labor force participants in West Philadelphia, an urban poor area. Interviews were conducted with 246 labor force participants and 103 nonparticipants (who had no jobs, had not looked for work in the preceding month, did not believe jobs were available, and/or were not waiting for promised jobs) in a household survey modified to include men on the street or in commercial places. In addition, persons connected with the Young Great Society (YGS), a local community action group, conducted nonrandom interviews with 82 nonparticipants.

The researcher found a number of significant economic differences between participants and nonparticipants in the household sample: (1) Nonparticipants had last sought work through public employment agencies and friends, while participants more commonly used private employment agencies, newspaper advertisements, and direct applications to firms; (2) nonparticipants were more likely to have had no jobs in the preceding 2 years, and participants were more likely to have had only one job during that period; and (3) a greater percentage of nonparticipants than participants had left jobs because of personal problems and layoffs.

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[8] This training project was conducted under a contract with the Manpower Administration's Office of Special Manpower Programs.

Wages did not appear an important difference between the two groups. Participants and nonparticipants agreed on minimum acceptable hourly wages.

The researcher observed that a high proportion of the nonparticipants had looked for work in the last 30 months. Half of the nonparticipants in the household survey gave physical disability as their reason for not seeking work at that time, although most of them anticipated their disabilities would allow them to re-enter the labor force. Only 12 percent of the nonparticipants in the YGS survey said disability prevented them from returning to work. Their most common reasons were these: Inability to obtain jobs (15 percent); personal reasons—for example, jail records, low levels of education (20 percent); and no special reason (29 percent).

The researcher concluded that nonparticipation was often a shortrun phenomenon and that there were many similarities between the participants and nonparticipants. Thus, nonparticipation was just one symptom of the employment problems faced by many male workers in urban poor areas.

2.4 PROJECTS COMPLETED, JULY 1, 1968–JUNE 30, 1969—Research Contracts Under the EOA and the SSA

2.4.01 ARIZONA STATE UNIVERSITY
TEMPE, ARIZ.

CONTRACT NO. 41–7–005–3

Principal Staff: Dr. Calvin Daane, College of Education

Report Title: Developing Group Counseling Models for the Neighborhood Youth Corps

Abstract: This study developed and tested five group counseling models for use in Neighborhood Youth Corps (NYC) programs. A representative sample of 243 in-school enrollees in Albuquerque, N. M., and out-of-school enrollees in Phoenix, Ariz., were assigned to five types of experimental counseling groups and two control groups. Sixteen 2-hour counseling sessions extended over 8 weeks were conducted by teams consisting of a professional counselor and an NYC project coordinator, who underwent 3 weeks of intensive training in conducting the models.

The counseling rationale was based on observation and interviews with personnel and enrollees at selected NYC projects and a review of the literature dealing with the NYC population, which suggested that these youth were disproportionately beset by problems of coping with authority, communication skills, vacillation between pessimism and optimism, and conflicts between environmental independence and psychological dependence. Accordingly, the rationale rested on the premise that behavior conditioning within an existential group framework (designed to encourage free expression of inner feelings) would best foster the enrollees' personal growth.

The five models (interpersonal, problem identification, intrapersonal, perceptual modification, and relationship) each had a different focus, but the same basic counseling techniques, developed from dynamic and behavioral learning concepts, were employed by the counseling teams in all models. The techniques included task prescription (instruction), selective responding (operant conditioning), modeling (social imitation), and "other-rapport" statements (free insight).

Among the enrollees who participated in the counseling, the study documented improvements in social behavior and employability and a reduction in police contacts. In-school enrollees showed the greatest gains in expanding their perceptions and out-of-school enrollees in their attitudes toward the NYC program, work, and fellow workers. The respective models which focused on such changes—perceptual modification and problem identification—were superior to the other models in many respects and called for rather highly organized sets of behaviors which minimally trained counselors might readily learn. Since most of the NYC coordinators who served as cocounselors lacked professional counselor training, it is especially significant that the researcher found the professional-paraprofessional teams very effective in group counseling.

Project staff presented their findings at a session of the Counselor Education and Supervision Division at the 1968 convention of the American Personnel and Guidance Association and at a 1968 meeting of the Subcommittee on Research of the National Manpower Advisory Committee. The researcher is exploring publication of a textbook on counseling based on his work in this field.

2.4.02 NATIONAL ANALYSTS, INC.
PHILADELPHIA, PA.

CONTRACT NOS. 41–7–001–40
81–40–66–18

Principal Staff: Dr. Gerald D. Robin

Report Title: An Assessment of the In-Public School Neighborhood Youth Corps Projects in Cincinnati and Detroit, With Special Reference to Summer-Only and Year-Round Enrollees.

Abstract: This study investigated the impact on enrollees of the year-round and summer-only in-school Neighborhood Youth Corps programs in Cincinnati and Detroit. A sample of 890 youth, representing enrollees and a comparable group not enrolled, were interviewed three times during June 1966-April 1967 to determine changes in performance and attitudes. Their parents were also interviewed and school and police records were analyzed.

Since the youth not enrolled in NYC had a higher unemployment rate, the researcher concluded that NYC was fulfilling a real need in providing job opportunities to deprived youth. Nearly all enrollees were satisfied with their NYC jobs and their supervision, but wanted more counseling. A substantial proportion of the enrollees felt that the money earned in the NYC had been a great help to their families. The researcher, using several measures of attitudes and performance, found no improvement in NYC enrollees' perceptions of school and work or in their record of delinquent behavior when compared with the control group.

The NYC enrollees' background lends perspective to these findings. Nearly two-thirds came from fatherless homes; half lived in a household of at least seven people who shared a family income of some $3,100 in Cincinnati and $4,000 in Detroit; one-fourth were the family's main wage earner; and about half had a record of police contact.

The researcher cautioned that the study was designed to appraise overall NYC program impact and recommended that a study be undertaken on the effects of specific NYC program components, such as the quality of work supervision.

The Department of Labor has used the findings of this report in a paper supporting changes in the operations of the in-school youth program. In addition, the findings are being incorporated in a publication on the implications for NYC of several studies.

2.4.03 STATE UNIVERSITY OF NEW YORK, BUFFALO
BUFFALO, N.Y.

CONTRACT NO. 41–8–005–34

Principal Staff: Dr. John E. Drotning, Dr. David B. Lipsky, and Myron D. Fottler, Department of Industrial Relations

Report Title: Jobs, Education, and Training: Research of a Project Combining On-the-Job and Literacy Training for the Disadvantaged, Phase I

Abstract: This study determined the feasibility of investigating the interaction among participants in Project Jobs, Education, and Training (JET), an on-the-job training program sponsored by the Opportunities Development Corporation (ODC), a private, nonprofit corporation in the Buffalo area.

The study outlined the objectives and procedures for an investigation of the feelings and attitudes of managers, immediate supervisors, and union representatives concerning JET trainees and their experience in operating the JET program. The researchers recommended that a control group of nonparticipating firms be used to compare the attitudes and activities of managers, supervisors, and union representatives concerning disadvantaged workers in general.

The study also developed a methodology and design for the proposed research, constructed experimental questionnaires for employers and trainees participating in Project JET, and pretested the employer form.

The full-scale study is being conducted under a new research contract (see **1.5.20**).

2.4.04 RICE UNIVERSITY
HOUSTON, TEX.

CONTRACT NO. 41–7–003–46

Principal Staff: Dr. Edwin Harwood and Robert Olasov, Department of Anthropology and Sociology

Report Title: Houston's Out-of-School Neighborhood Youth Corps: A Comparative Observational Study of the NYC's Impact on the Work Attitudes and Job Futures of Poverty Youths

Abstract: This project examined the impact of Neighborhood Youth Corps operating procedures on enrollees in out-of-school NYC projects in the Houston metropolitan area. The study identified problems of enrollee recruitment, determined the program's effectiveness in developing motivation and positive attitudes toward learning among enrollees, and assessed the relationship between NYC wage incentives and enrollee recruitment and morale.

The investigation reported that although the minimum wage rate paid for NYC work attracted young men to the program, it was not high enough to hold them in Houston's tight labor market, where unskilled and semiskilled jobs were readily available. Girls, however, had much more limited alternatives and remained in the program far longer. The study suggested several methods for developing motivation and positive attitudes in enrollees by reducing counselor caseloads, maintaining continuity between enrollee and supervisor, and presenting guidance activities in a socialized framework. In addition, the study proposed such improvements in the program as longer training time, skill training stratified to match various enrollee capabilities, and governmental provision of employment as a last resort. Also recommended was further research on the very different job requirements and job opportunities of various categories of low-income youth—girls versus boys, youth under 18 with those over 18, and young women with and without dependent children.

SECTION 3. LIST OF REPORTS COMPLETED, FISCAL YEARS 1963–69

This section lists the completed reports described in section 2 and those completed prior to July 1, 1968, on research contracts, doctoral dissertation grants, and research project grants under the Manpower Development and Training Act and research contracts under the Economic Opportunity Act and the Social Security Act.

ABBREVIATIONS KEY AND EXPLANATION

PLEASE READ CAREFULLY TO AVOID UNNECESSARY DELAYS IN OBTAINING REPORTS. DO NOT ROUTINELY WRITE TO THE MANPOWER ADMINISTRATION FOR THESE REPORTS.

Section 3 lists reports on research completed for the Manpower Administration under contracts and grants during fiscal years 1963–69. (A few projects which did not result in formal reports are omitted; for example, machine printouts of special tabulations. Publications and major unpublished reports prepared by faculty and students under the Manpower Research Institutional Grant Program are listed in *The Manpower Research Institutional Grant Program: The First Three Years,* a booklet available from the Manpower Administration.)

Since the Manpower Administration's supply of these reports usually permits distribution only on a highly selective basis, arrangements were made during fiscal year 1968 for sale of the reports through two federally operated information storage and retrieval systems. These arrangements, as well as other sources of the reports and related publications are indicated in the right-hand column of the listing. The key to the abbreviations used there and instructions for obtaining the publications are as follows:

CFSTI—Clearinghouse for Federal Scientific and Technical Information, Springfield, Va. 22151. Copies of reports with this designation may be purchased for $3 (paper) or 65 cents (microfiche) each. Send remittance with order directly to the clearinghouse and specify the accession number (AD or PB plus a 6-digit number) given in the listing.

ERIC—Educational Resources Information Center, EDRS, c/o NCR Co., 4936 Fairmont Ave., Bethesda, Md. 20014. Copies are priced according to the number of pages. The first price in the listing is for paper; the Mf price is for microfiche. Send remittance with order directly to ERIC-EDRS and specify the accession number (ED or MP plus a 6-digit number) given in the listing.

GPO—Government Printing Office. Send orders directly to Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, with remittance for specified amount.

MA—Manpower Administration. Single copies free upon request to U.S. Department of Labor, Manpower Administration, Associate Manpower Administrator, Washington, D.C. 20210.

Other sources are indicated for a few publications. Order from the specified source or, for books, from bookstores.

In addition, reports on contract research projects (3.1 of this section) are available for inspection in the Manpower Administration's Office of Manpower Research or in regional offices of the Bureau of Labor Statistics (BLS) and the Manpower Administration (MA). (See addresses, p. 149.) They may also be inspected at the universities which hold manpower research institutional grants (section 1.2). They may also be available at certain libraries listed on pp. 150–154. However, some of these libraries were not subscribers at the time some of the reports were distributed.

Reports on dissertation research grants (included in 3.2 of this section) can usually be purchased from University Microfilms, Inc., 300 North Zeeb Road, Ann Arbor, Mich. 48102, but current information on prices is not available. Those for sale by CFSTI are as indicated in the listing.

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3.1 LIST OF REPORTS COMPLETED, FISCAL YEARS 1963–69—Research Contracts Under the MDTA

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3.1.01 American Association of University Women Educational Foundation—Eleanor F. Dolan, No. 81–08–18 Counseling Techniques for Mature Women—Report of the Adult Counselor Program, June 14-August 6, 1965	CFSTI—PB 177322.
3.1.02 American Institutes for Research—James W. Altman and Edward J. Morrison, No. MDTA 37–64 School and Community Factors in Employment Success of Trade and Industry Course Graduates	
3.1.03 Arthur D. Little, Inc.—No. MDTA 17–64 Analysis of Automation Potential by Means of Unit Operations	CFSTI—PB 177415.
3.1.04 Atlantic Research Corp.—John F. Wallerstedt, Hans W. Weigert, and Col. Walter R. Lawson, USA (Ret.), No. 81–49–68–19 An Analysis of Post-World War II Manpower Research, Policy and Program Experience Applicable to Current Manpower Planning for Peacetime Conversion of Military Manpower to Civilian Occupations	CFSTI—PB 183258.
3.1.05 Auerbach Corp.—Richard Ridall and Murray Dodge, No. OAM 7–63 A Study of Manpower Requirements for Technical Information Support Personnel	CFSTI—PB 177331; MA—*Manpower for Technical Information Work—A Pilot Study*, Manpower/Automation Research Monograph No. 1, 1964 (summary); Manpower/Automation Research Notice, 1964 (digest).
3.1.06 Behavior Research Institute—Sheldon J. Lachman and Benjamin D. Singer, No. 81–24–68–03 The Detroit Riot of July 1967—A Psychological, Social and Economic Profile of 500 Arrestees	CFSTI—PB 178035; ERIC—MP 000559 ($3.24, Mf $0.50), MA—*The Detroit Riot . . . A Profile of 500 Prisoners* (summary); and "Profile of an Urban Rioter," *Employment Service Review,* March-April 1968, pp. 38–40 (digest).

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3.1.07 Bureau of Social Science Research, Inc.—Laure M. Sharp and Albert D. Biderman, Nos. MDTA 16–63 and 81–08–26 The Employment of Retired Military Personnel	CFSTI—AD 646463; MA—"Out of Uniform," reprint from *Monthly Labor Review,* January and February 1967 (excerpts); Manpower/Automation Research Notice, 1966 (digest); "The Employment of Retired Military Personnel," *American Vocational Journal,* January 1969 (summary and evaluation); "The Convergence of Military and Civilian Occupational Structures—Evidence from Studies of Military Retired Employment," *The American Journal of Sociology,* vol. 73, No. 4, January 1968, pp. 381–399.
3.1.08 California, University of, Berkeley—Margaret S. Gordon, No. MDTA 8–63 Retraining and Labor Market Adjustment in Western Europe	CFSTI—AD 603647; GPO—Manpower/Automation Research Monograph No. 4, 1965 ($1.75).
3.1.09 California, University of, Berkeley—R. A. Gordon, No. MDTA 32–64 Long-Term Manpower Projections—Proceedings of a Conference on Unemployment and the American Economy, June 25–26, 1964	CFSTI—PB 177432.
3.1.10 California, University of, Berkeley—E. R. F. W. Crossman et al., No. 81–04–05 Evaluation of Changes in Skill Profile and Job Content Due to Technological Change; Methodology and Pilot Results from the Banking, Steel and Aerospace Industries	CFSTI—PB 174221; ERIC—ED 015326 ($12.32; Mf $1.25); MA—Manpower/Automation Research Notice, 1966 (digest).
3.1.11 Cambridge Center for Social Studies—Rev. Joseph M. Becker, S.J., No. 81–23–66–03 Supplemental Unemployment Benefits	CFSTI—PB 178389 (original report); ERIC—MP 000650 ($22.30, Mf $1.75); *Guaranteed Income for the Unemployed: The Story of SUB,* Johns Hopkins Press, Baltimore, 1968 ($12.00; book based on the study); Sar A. Levitan, ed., "Private Supplementation of Public Unemployment Benefits," *Towards Freedom From Want,* Industrial Relations Research Association, Madison, Wis., 1968, pp. 105–132 ($4.50).
3.1.12 Census, Bureau of the—Wilson H. Grabill, No. MDTA 27–64 Childspacing: U.S. Census of Population, 1960, Subject Reports, Series PC (2)-3B	GPO—1968 ($1.00).

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3.1.14 Census, Bureau of the—David P. McNelis, No. 81–09–66–10 Characteristics of Local Government Employees—A Pretest Survey	CFSTI—PB 177323; ERIC—MP 000628 ($1.00, Mf $0.25).
3.1.15 Colorado, University of—Leslie Fishman et al., No. MDTA 42–64 Methodology for Projection of Occupational Trends in the Denver Standard Metropolitan Statistical Area	CFSTI—PB 177325; ERIC—ED 016132 ($8.16, Mf $1.00).
3.1.16 Columbia University—Dale L. Hiestand, No. MDTA 13–63 Economic Growth and Employment Opportunities for Minorities	Columbia University Press, New York, 1964 ($6.00).
3.1.17 Columbia University—Eli Ginzberg, Dale L. Hiestand, and Beatrice G. Reubens, No. MDTA 10–64 The Pluralistic Economy	ERIC—MP 000218 ($1.72, Mf $0.25); McGraw-Hill Book Co., New York, 1965 ($1.95, paperback); MA—*Expanding Employment in a Pluralistic Economy*, Seminar on Manpower Policy and Program, October 1965 (summary); MA—Manpower/Automation Research Notice (digest).
3.1.18 Columbia University—Aaron W. Warner and Paul H. Norgren, No. MDTA 15–64 Obsolescence and Updating of Engineers' and Scientists' Skills: A Pilot Study	CFSTI—PB 178168; ERIC—ED 015324 ($6.64, Mf $0.75).
3.1.19 Columbia University—Harry I. Greenfield, No. 81–31–12 Manpower and the Growth of Producer Services	Columbia University Press, New York, 1966 ($6.00); ERIC—ED 016143 (Mf $0.75).
3.1.20 Columbia University—James W. Kuhn, No. 81–31–12 Scientific and Managerial Manpower in Nuclear Industry	Columbia University Press, New York, 1966 ($7.50).

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3.1.21 Columbia University—Eli Ginzberg, No. 81–34–66–02 The Middle Class Negro in the White Man's World	Columbia University Press, New York, 1967 ($5.00).
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3.1.24 Columbia University—Dean Morse, No. 81–34–67–25 The Peripheral Worker	Columbia University Press, New York and London, 1969 ($7.50).
3.1.25 Commission on Human Resources and Advanced Education—John K. Folger, No. 81–09–66–16 Symposium on Manpower Theory	CFSTI—PB 177412; *The Journal of Human Resources*, vol. II, No. 2, Spring 1967, pp. 143–253 ($2.00).
3.1.26 Denver, University of—James F. Mahar and George E. Bardwell, No. MDTA 36–64 A Method of Measuring Short-Term Impacts of Technological Change on Employment and Occupations—As Tested in Selected Power Laundries	CFSTI—PB 170177; MA—Manpower/Automation Research Notice, 1966 (digest).
3.1.27 Employment Security, Bureau of—Alfred L. Green, No. 81–09–66–12 Manpower and the Public Employment Service in Europe—A Study of Programs and Operations	CFSTI—PB 177410.
3.1.28 George Washington University, The—Regis H. Walther and Margaret L. Magnusson, No. 81–09–66–19 A Retrospective Study of the Effectiveness of Out-of-School Neighborhood Youth Corps Programs in Four Urban Sites	CFSTI—PB 177132.
3.1.29 Georgia Institute of Technology—John L. Fulmer, Robert E. Green, and Paul B. Han, No. MDTA 19–63 Research Design to Forecast Demand for New Types of Technicians in an Industry	CFSTI—AD 602431.

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3.1.30 Greenleigh Associates, Inc.—Arthur Greenleigh, No. 81–34–66–33 A Study: Those Not Working in a Tight Labor Market—Milwaukee, Wis.	CFSTI—PB 177431; ERIC—ED 015305 ($6.08, Mf $0.75).
3.1.31 Harvard University—James G. Scoville, No. MDTA 29–64 The Job Content of the U.S. Economy, 1940–1970	McGraw-Hill Book Co., New York, 1969 ($6.95).
3.1.32 Harvard University—Peter B. Doeringer and Michael J. Piore, No. MDTA 38–64 Internal Labor Markets, Technological Change, and Labor Force Adjustment	CFSTI—PB 174614; MA—Reprinted in *Work Force Adjustments in Private Industry—Their Implications for Manpower Policy,* Manpower/Automation Research Monograph No. 7, 1968.
3.1.33 Harvard University—Daniel Quinn Mills, No. 81–23–68–11 A Study of Problems of Manpower Utilization in the Construction Industry: Intermittency of Employment, Unemployment and Labor Shortages	CFSTI—PB 184849.
3.1.34 Houston, University of—E. E. Liebhafsky, No. 81–42–04 An Analysis of Forces Underlying Decisions of Potential Workers to Refrain from Labor Force Participation	CFSTI—PB 177430.
3.1.35 Human Sciences Research, Inc.—Sidney A. Fine, No. OAM 3–63 The Nature of Automated Jobs and Their Educational and Training Requirements	CFSTI—PB 173177.
3.1.36 Illinois Institute of Technology—Elmer H. Burack, No. 81–15–66–17 Management and Automation	CFSTI—PB 179315.
3.1.37 Illinois, University of—Walter H. Franke and Irvin Sobel, No. MDTA 5–64 The Shortage of Skilled and Technical Workers	CFSTI—PB 180367; MA—Manpower Research Study Summary, 1969 (digest).

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3.1.38 International Labour Office—No. OAM 5–63B Abstract of Articles on the Social Aspects of Automation: A Collection Based on Selected Literature Published in Leading Industrialized Countries	CFSTI—PB 177549.
3.1.39 International Labour Office—No. OAM 5–63B Health and Safety Aspects of Automation and Technological Change—A Collection of Abstracts, 1956 to 1962	MA—1964.
3.1.40 International Labour Office—No. OAM 5–63B A Review of Recent Soviet Literature on the Social Aspects of Automation and Technical Changes in the U.S.S.R.	CFSTI—PB 177548.
3.1.41 International Labour Office—No. OAM 5–63B Social Aspects of Automation: A Bibliography of Material Available in the International Labour Office	CFSTI—PB 177547; AUT/DOC/2 (Revised), Automation Unit, International Labour Office, 1211 Geneva 22, Switzerland.
3.1.42 International Labour Office—Angela Butler and Sven Grabe, No. OAM 5–63C European Apprenticeship	CFSTI—PB 177294; ILO, Geneva, 1966, CIRF Monographs, vol. 1, No. 2 ($4.00).
3.1.43 International Labour Office—Sven Grabe, No. OAM 5–63D Training of Maintenance Workers	CFSTI—PB 176741; ERIC—MP 000515 ($1.80, Mf. $0.25); AUT/DOC/6, Automation Unit, International Labour Office, 1211 Geneva 22, Switzerland.
3.1.44 International Labour Office—F. Sellier and C. Zarka, No. OAM 5–63F International Differences in Factors Affecting Labor Mobility	CFSTI—PB 177295; ERIC—ED 016087 ($11.44, Mf $1.25).
3.1.45 International Labour Office—N. Franklin, No. OAM 5–63G Redundancy Procedures in Selected Western European Countries	CFSTI—PB 176082; ERIC—MP 000578 ($10.25, Mf $1.00); AUT/ECON/2, Automation Unit, International Labour Office, 1211 Geneva 22, Switzerland.
3.1.46 Labor Statistics, Bureau of—Joseph Bloch, No. MDTA 1–63A The Operation of Severance Pay Plans and Their Implications for Labor Mobility	GPO—BLS Bulletin 1462, 1966 ($0.60).

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3.1.47 Labor Statistics, Bureau of—Donald Landay, No. MDTA 1–63B Labor Mobility and Private Pension Plans—A Study of Vesting, Early Retirement, and Portability Provisions	GPO—BLS Bulletin 1407, 1964 ($0.45).
3.1.48 Labor Statistics, Bureau of—Sophia (Cooper) Travis, No. MDTA 7–63 Formal Occupational Training of Adult Workers: Its Extent, Nature, and Use	MA—Manpower/Automation Research Monograph No. 2, 1964 (summary); Manpower/Automation Research Notice, 1964 (digest).
3.1.49 Labor Statistics, Bureau of—Harry Greenspan, No. MDTA 23–64 Occupational Employment Patterns for 1960 and 1975	GPO—BLS Bulletin No. 1599, 1968 ($2.25); GPO—BLS Bulletin No. 1606, 1969, *Tomorrow's Manpower Needs, National Manpower Projections and a Guide to their Use as a Tool in Developing State and Area Manpower Projections,* vol. I, *Developing Area Manpower Projections* ($1.00); vol. II, *National Trends and Outlook: Industry Employment and Occupational Structure,* ($1.25); vol. III, *National Trends and Outlook: Occupational Employment* ($0.55); vol. IV, *The National Industry-Occupational Matrix and Other Manpower Data* ($2.00).
3.1.50 Labor Statistics, Bureau of—Donald Landay, No. MDTA 24–64 Health Insurance Coverage for Workers on Layoff	ERIC—ED 016140 ($0.28, Mf. $0.25); MA—Reprint from *Monthly Labor Review,* August 1966.
3.1.51 Labor Statistics, Bureau of—Carl Rosenfeld, No. 81–09–66–07 A Survey of Volunteer Work, November 1965	CFSTI—PB 178338; ERIC—MP 000625 ($4.00, Mf $0.50); MA—*Americans Volunteer,* Manpower/Automation Research Monograph No. 10, 1969 (summary with complete statistical appendix and supplementary data); "Volunteers: Report on an American Tradition," *Manpower,* vol. 1, No. 3, April 1969, pp. 16–21 (article).
3.1.52 Labor Statistics, Bureau of—Edgar Weinberg, No. 81–09–66–08 Job Redesign for Older Workers—10 Case Studies	ERIC—MP 000141 ($0.32, Mf $0.25); GPO—BLS Bulletin 1523, 1967 ($0.40); MA—"Job Redesign for Older Workers: Case Studies," reprint from *Monthly Labor Review,* January 1967 (summary); Manpower/Automation Research Notice, 1967 (digest).

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3.1.53 Labor Statistics, Bureau of—Harvey Hilaski, No. 81–09–66–15 Labor Standards and Job Training in Foreign Countries	ERIC—MP 000686 ($0.40, Mf $0.25); MA—Reprint from *Monthly Labor Review*, September 1967.
3.1.54 Labor Statistics, Bureau of—William Milligan, No. 81–09–67–10 Survey of Employment and Unemployment in Slum Areas	GPO—"Joblessness and Poverty in Urban Slums," *Manpower Report of the President*, April 1967, pp. 73–100 ($1.50); MA—*A Sharper Look at Unemployment in U.S. Cities and Slums, A Summary Report submitted to the President by the Secretary of Labor*, 1967.
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3.1.69 National Bureau of Economic Research—Richard A. Easterlin, MDTA 20–63 Population, Labor Force, and Long Swings in Economic Growth: The American Experience	National Bureau of Economic Research, Columbia University Press, New York, 1968 ($10.00); "Economic-Demographic Interactions and Long Swings in Economic Growth," *The American Economic Review*, December 1966, pp. 1063–1104 (selective summary).
3.1.70 National Bureau of Economic Research—Geoffrey H. Moore, No. MDTA 31–64 Measurement and Interpretation of Job Vacancies—A Conference Report of the National Bureau of Economic Research	Columbia University Press, New York, 1966 ($12.50).
3.1.71 National Committee for Children and Youth—Ruth Cowan Nash, Ed., No. MDTA 15–63 Rural Youth in a Changing Environment, Report of the National Conference Sponsored by the National Committee for Children and Youth at Oklahoma State University, Stillwater, September 22–25, 1963	CFSTI—PB 177411.
3.1.72 National Committee for Children and Youth—Lee D. Burchinal, Ed. (Office of Juvenile Delinquency and Youth Development, U.S. Department of Health, Education, and Welfare), No. MDTA 15–63 Rural Youth in Crisis: Facts, Myths, and Social Change (Background papers for the conference)	GPO—1965 ($1.25).
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3.1.74 National Educational Television and Radio Center—Henry C. Alter, No. 81–34–66–28 Choice: Challenge for Modern Women (Series of 12 half-hour films of panel discussions)	N.E.T., 10 Columbus Circle, New York, N.Y. 10019.

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3.1.77 National Manpower Policy Task Force—Gary B. Hansen, No. 81–09–66–31 Britain's Industrial Training Act; Its History, Development, and Implications for America	CFSTI—PB 177145; National Manpower Policy Task Force, 818 18th St., NW., Washington, D.C. 20006 ($1.25); "Britain's Industrial Training Act: Is It Working?," *Journal of the American Society of Training Directors,* (forthcoming summer 1969).
3.1.78 National Manpower Policy Task Force—Edward Kalachek, No. 81–09–66–31 The Youth Labor Market	Policy Paper No. 12, Publications Office, Institute of Labor and Industrial Relations, P.O. Box 1567, Ann Arbor, Mich. 48106 ($1.50).
3.1.79 National Manpower Policy Task Force—George Strauss, No. 81–09–66–31 Apprenticeship Problems and Policies	CFSTI—PB 183096.
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3.1.84 National Planning Association—Leonard A. Lecht, No. 81–08–20 Manpower Requirements for National Objectives in the 1970's	CFSTI—PB 177821; ERIC—MP 000512 ($18.60, Mf $1.75); *Manpower Needs for National Goals in the 1970's*, Frederick A. Praeger, New York, 1969 ($7.50); "National Priorities, Manpower Needs, and the Impact of Diminished Defense Purchases in Viet Nam," *Federal Programs for the Development of Human Resources*, Joint Economic Committee of Congress, 1968.
3.1.85 National Planning Association—Norman Frumkin, No. 81–09–67–08 Manpower Implications of Alternative Priorities for Coping with Poverty	CFSTI—PB 182143; GPO—*Federal Programs for the Development of Human Resources, A Compendium of Papers Submitted to the Subcommittee on Economic Progress of the Joint Economic Committee*, vol. 1, 1968 ($1.00).
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3.1.88 North Carolina State University, Raleigh—Adger B. Carroll and Loren A. Ihnen, No. 81–32–11 Costs and Returns of Technical Education: A Pilot Study	CFSTI—PB 178387; ERIC—ED 015247 ($2.36, Mf $0.25); MA—Manpower/Automation Research Notice, 1966 (digest); "Costs and Returns for Two Years of Postsecondary Technical Schooling: A Pilot Study," *Journal of Political Economy*, vol. 75, No. 6, December 1967, pp. 862–873; *Costs and Returns for Investment in Technical Schooling by a Group of North Carolina Graduates*, Economics Research Report No. 5, December 1967, Department of Economics, North Carolina State University at Raleigh, Raleigh, N.C. 27607.

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3.1.124 Upjohn Institute for Employment Research, The W. E.—Sidney Fine, No. 81–09–67–22 The Feasibility of a Direct Method of Obtaining Manpower Demand Data, Report for Discussion—Phase I, November 8, 1968	CFSTI—PB 182146.
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3.1.132 Women's Bureau—Mary Hilton, No. 81–08–10 New Approaches to Counseling Girls in the 1960's—A Report of the Midwest Regional Pilot Conference Held at University of Chicago Center for Continuing Education, February 26–27, 1965	GPO—1966 ($0.30); "A Survey of Counselor Attitudes Toward Women," *Minnesota Guidance Bulletin*, Winter 1969 (article).
3.1.133 Women's Bureau—Mary Dublin Keyserling, No. 81–09–66–09 Counseling Girls Toward New Perspectives: A Report of the Middle Atlantic Regional Pilot Conference Held in Philadelphia, Pa., December 2–4, 1965	GPO—1966 ($0.35).
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3.2 LIST OF REPORTS COMPLETED, FISCAL YEARS 1963–69—Doctoral Dissertation Grants Under the MDTA

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3.2.08 Cornell University—Howard G. Foster, No. 91–34–68–51 Labor Supply in the Construction Industry: A Case Study of Upstate New York	CFSTI—PB 184045.
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3.2.12 Iowa, The University of—Theodore E. Newman, No. 91–17–67–09 Labor Markets and the Supply of Labor	CFSTI—PB 179291.
3.2.13 Maryland, University of—Rev. William J. Byron, No. 91–22–67–04 The Applicability of the Job Bank Concept to the Washington, D.C., Market for Domestic Dayworkers	CFSTI—PB 183067.
3.2.14 Massachusetts Institute of Technology—Malcolm S. Cohen, No. 91–23–66–36 The Determinants of the Relative Supply and Demand for Unskilled Workers. Statistical Appendix	CFSTI—PB 177554; CFSTI—PB 177555 (statistical appendix); "Variability by Skill in Cyclical Unemployment," *Monthly Labor Review,* August 1967, pp. 8–11 (selective summary).

Institution, Investigator, Grant No., and Title of Report	*Source of Copies (See abbreviation key and explanation, p. 147)*
3.2.15 Michigan State University—Worth C. Summers, No. 91–24–66–43 The Impact of Work Organizations on a Scientific Discipline	
3.2.16 Michigan State University—John Pease, No. 91–24–66–44 The Weberian Mine: A Probationary Analysis of Class Stratification; Being A Critical Essay on the Study of Class in American Sociology and a Suggestion for Improvement, with Special Reference to the Ideas of Max Weber, and with some Remarks on the Speculations of Mr. Faris, Mr. Nisbet, and other Writers	CFSTI—PB 179852.
3.2.17 Michigan State University—Joan Rytina, No. 91–24–66–45 The Ideology of American Stratification	CFSTI—PB 178305; William H. Form and Joan Rytina, "Ideological Beliefs on the Distribution of Power in the United States," *American Sociological Review*, vol. 34, No. 1, February 1969.
3.2.18 Michigan State University—Lawrence E. Sneden II, No. 91–24–67–01 Factors Involved in Upward Social Mobility from the Culture of Poverty	CFSTI—PB 182148.
3.2.19 Michigan State University—Jon M. Shepard, No. 91–24–67–03 Man-Machine Relationships, Attitudes Toward Work and Meanings in the Work Role	CFSTI—PB 178467; "Functional Specialization and Work Attitudes," *Industrial Relations*, vol. 8, No. 2, February 1969, pp. 185–194.
3.2.20 Michigan, The University of—James A. Sweet, No. 91–24–66–22 Family Composition and the Labor Force Activity of Married Women in the United States	CFSTI—PB 179698.
3.2.21 Michigan, The University of—Robert B. Athanasiou, No. 91–24–68–61 Selection and Socialization: A Study of Engineering Student Attrition	CFSTI—PB 184269.

Institution, Investigator, Grant No., and Title of Report	*Source of Copies (See abbreviation key and explanation, p. 147)*
3.2.22 Michigan, The University of—Donald Alfred Sommerfeld, No. 91–24–68–62 Job Training Programs in Detroit: A Comparative Study	CFSTI—PB 183742.
3.2.23 New School for Social Research—Thomas H. Shey, No. 91–34–67–46 The Professional Socialization of Social Work Students: How Length of Schooling, Prior Work Experience, and Other Variables, Affect Some Aspects of the Professional Socialization of Graduate Social Work Students	CFSTI—PB 179660.
3.2.24 Northwestern University—Philip Glenn (Teets) Cotterill, No. 91–15–68–16 A Model of Labor in Retail Trade	CFSTI—PB 179697.
3.2.25 Ohio State University Research Foundation, The—Leonard Emil Kreider, No. 91–37–66–13 The Development and Utilization of Managerial Talent: A Case Study of Manufacturing Managers in Columbus, Ohio	CFSTI—PB 178351.
3.2.26 Oklahoma State University of Agriculture and Applied Science, Research Foundation—Gaylen R. Wallace, No. 91–38–66–12 An Analysis of Job Satisfaction of Employed Youth Involved in an Experimental School Dropout Rehabilitation Program	CFSTI—PB 177546.
3.2.27 Oklahoma State University of Agriculture and Applied Science, Research Foundation—Gerald Eugene Boggs, No. 91–38–66–50 A Comparative Analysis of the Impact of Various Types of Curricula on the Vocational Success of School Dropouts	CFSTI—PB 177776.
3.2.28 Oklahoma State University of Agriculture and Applied Science, Research Foundation—Paul Rountree Blume, No. 91–38–67–14	CFSTI—PB 178532.

Institution, Investigator, Grant No., and Title of Report	*Source of Copies (See abbreviation key and explanation, p. 147)*
An Evaluation of Institutional Vocational Training Received by American Indians Through the Muskogee, Oklahoma Area Office of the Bureau of Indian Affairs	
3.2.29 Pennsylvania, University of—Moshe Sicron, No. 91–40–67–51 Interrelationship Between the Educational Level and Occupational Structure of the Labor Force (An International and Inter-Temporal Comparison), part I. A Dissertation in Demography, part II. Tables for Countries	CFSTI—PB 179746 (part I); CFSTI—PB 179747 (part II).
3.2.30 Purdue Research Foundation—Darrell Raymond Benjamin, No. 91–16–67–13 A Thirty-One Year Longitudinal Study of Engineering Students' Interest Profiles and Career Patterns	CFSTI—PB 182533.
3.2.31 Purdue Research Foundation—Lawrence S. Zudak, No. 91–16–68–35 A Theoretical Analysis of the Supply and Demand for Labor in the Steel Industry, volume I	CFSTI—PB 184069.
3.2.32 Southern Methodist University—Dale Bruce Rasmussen, No. 91–46–68–43 Determinants of Rates of Return to Investment in On-the-Job Training	CFSTI—PB 184024.
3.2.33 Syracuse University—John William Pelosi, No. 91–34–67–54 A Study of the Effects of Examiner Race, Sex, and Style on Test Responses of Negro Examinees	CFSTI—PB 178901.
3.2.34 Texas Technological College—Garland Frank Lawlis, No. 91–46–67–47 Motivational Aspects of the Chronically Unemployed	CFSTI—PB 178774.
3.2.35 Washington University—Robert Albert Ullrich, No. 91–27–67–15 A Study of the Motivating and Dissatisfying Forces in an Isolated Work Situation	CFSTI—PB 178324.

Institution, Investigator, Grant No., and Title of Report	*Source of Copies (See abbreviation key and explanation, p. 147)*
3.2.36 Washington, University of—Stephen Edward Baldwin, No. 91–51–66–54 The Impact of Governmental Programs on the Employability of Youth in the Seattle Labor Market	CFSTI—PB 179748.
3.2.37 Wisconsin, The University of—James S. Crabtree, No. 91–53–66–11 The Structure of Related Instruction in Wisconsin Apprenticeship Programs	CFSTI—PB 177567; ERIC—MP 000681 ($5.84, Mf $0.75).
3.2.38 Wisconsin, The University of—Leonard J. Hausman, No. 91–53–66–68 The 100% Welfare Tax Rate: Its Incidence and Effects	CFSTI—PB 177566.
3.2.39 Wisconsin, The University of—Arie Shirom, No. 91–53–67–20 Industrial Cooperation and Adjustment to Technological Change: A Study of Joint-Management Union Committees	CFSTI—PB 177565.
3.2.40 Wisconsin, The University of—S. Muthuchidambaram, No. 91–53–68–21 Determinants of Income in the Madras Labor Market	CFSTI—PB 179079.
3.2.41 Yale University—Daniel C. Rogers, No. 91–07–66–06 Private Rates of Return to Education in the United States: A Case Study	CFSTI—PB 177557.
3.2.42 Yale University—Robert S. Goldfarb, Nos. 91–07–66–19 and 91–07–68–11 The Evaluation of Government Programs: The Case of New Haven's Manpower Training Activities	CFSTI—PB 182173.

3.3 LIST OF REPORTS COMPLETED, FISCAL YEARS 1963–69—Research Project Grants Under the MDTA

Institution, Investigator(s), Grant No., and Title of Report	*Source of Copies (See abbreviation key and explanation, p. 147)*
3.3.01 American University, The—Charles A. Dailey, No. 91–09–66–25 Project Gatekeeper: The Reduction of Job Discrimination by the Use of Self-Confrontation and Feedback to the Discriminator	CFSTI—PB 177352; ERIC—ED 016137 ($5.32, Mf $0.75).
3.3.02 American University, The—Nancy Barrett, William Carter, Charles McClenon, Stuart Smith, and Robert Wolpert, No. 91–09–69–05 Pretraining Vocational Orientation Through Job Rotation	CFSTI—PB 182147.
3.3.03 Arizona, University of—Trevor Bain, No. 91–03–66–39 The Impact of Defense Contract Termination on the Labor Force	CFSTI—PB 177873; ERIC—MP 000669 ($4.20, Mf $0.50); University of Arizona, Division of Economics and Business Research, Tucson, Ariz., *Defense Manpower and Contract Termination,* 1968 ($1.00).
3.3.04 Central Washington State College—Clayton C. Denman and Anne Smith Denman, Nos. 91–51–66–51 and 91–51–68–39 Ethnic Differences and Historical Change in the Manpower Resources of a Small Town	CFSTI—PB 183159; "Social Customs and Facility Planning," *Area Development Magazine,* December 1968.
3.3.05 Cornell University—Leonard P. Adams, No. 91–34–66–41 Case Studies of Viable Worker Management Relationships on Farms in New York State	CFSTI—PB 182822; Bulletin 1019, Cornell University, Agriculture Experiment Station, Ithaca, N.Y. 14850.
3.3.06 Cornell University—William H. Friedland, No. 91–34–66–49 Migrant Labor as a Form of Intermittent Social Organization and as a Channel of Geographical Mobility	CFSTI—PB 177867; "Migrant Labor: A Form of Intermittent Social Organization," *ILR Research,* vol. 13, No. 2, 1967 (summary).

Institution, Investigator(s), Grant No., and Title of Report	*Source of Copies (See abbreviation key and explanation, p. 147)*
3.3.07 Cornell University—William H. Friedland and Dorothy Nelkin, No. 91–34–67–48 Field Research in Migrant Labor in New York State	
3.3.08 Dillard University—Daniel C. Thompson, No. 91–17–02 An Investigation of the Utilization of the Manpower Skills of the 1964 Graduating Class of Dillard University	CFSTI—PB 177871.
3.3.09 Educational Testing Service—Benjamin Shimberg and John V. Moe, No. 91–32–68–18 A Pilot Study To Determine the Feasibility of Investigating Nationally the Impact of Licensing Practices on the Availability and Mobility of Nonprofessional Manpower in Occupations Where Skill Shortages Exist	CFSTI—PB 178306; MA—*Occupational Licensing Practices and the Supply of Nonprofessional Manpower*, Manpower/Automation Research Monograph No. 11, 1969 (summary with list of occupations licensed by States).
3.3.10 George Washington University, The—John Herbert Norton, No. 91–09–66–23 Accuracy Analysis for Projections of Manpower in Metropolitan Areas	CFSTI—PB 182073; ERIC—MP 000556 ($4.50, Mf $0.50).
3.3.11 Georgia, University of—Ethel B. Jones, No. 91–11–66–46 A Feasibility Study to Identify the Underemployed and to Examine the Labor Market Attachment of Labor Force Non-participants in a Low-Income Area	CFSTI—PB 177559; ERIC—MP 000531 ($3.84, Mf $0.50); Research Monograph No. 4, Bureau of Business and Economic Research, Graduate School of Business Administration, Athens, Ga., 1969 ($3.50).
3.3.12 Grambling College—Charles A. Berry, Jr., No. 91–17–03 An Investigation of the Utilization of the Manpower Skills of the 1964 Graduating Class of Grambling College	CFSTI—PB 177560.
3.3.13 Harvard University—Penny H. Feldman, David M. Gordon, Michael Reich, and Peter B. Doeringer (ed.), Nos. 91–23–68–06 and 91–23–68–50 Low-Income Labor Markets and Urban Manpower Programs: A Critical Assessment	

Institution, Investigator(s), Grant No., and Title of Report	*Source of Copies (See abbreviation key and explanation, p. 147)*
3.3.14 Illinois, University of—Adolf Sturmthal, No. 91–15–66–29 A Study of Methods for Forecasting Employment	CFSTI—PB 178008; ERIC—MP 000671 ($3.00, Mf $0.50).
3.3.15 Maryland, University of—John W. Wysong, No. 91–22–68–02 Factors Affecting Labor Use and Worker Productivity on Efficient Dairy Farms	CFSTI—PB 178776; University of Maryland, Department of Agricultural Economics, Ag. Econ. Mimeo Series No. 27.
3.3.16 Maryland, University of—John W. Wysong, No. 91–22–68–02 Labor Productivity and Labor Force Characteristics of Selected Types of Commercial Farms	CFSTI—PB 178777; University of Maryland, Department of Agriculture Economics, Ag. Econ. Mimeo Series No. 28.
3.3.17 Maryland, University of—John W. Wysong, No. 91–22–68–02 Private and Public Farm Manpower Policy Implications of the Dairy Farm Labor Resource Adjustment Process	CFSTI—PB 178775; University of Maryland, Department of Agricultural Economics, Ag. Econ. Mimeo Series No. 23.
3.3.18 Maryland, University of—Paul Wasserman and Mary Lee Bundy, No. 91–22–66–08 Manpower Utilization and Requirements in Library and Information Sciences	"Manpower Blueprint," *Library Journal,* Jan. 15, 1967; "The Library and Information in a Time of Change," *Pacific Northwest Library Association Quarterly,* January 1967.
3.3.19 Massachusetts Institute of Technology—Robert Evans, Jr., and George E. Delehanty, No. 91–20–06 Low-Wage Employment: An Inventory and Assessment	CFSTI—PB 182072; ERIC—MP 000591 ($4.40, Mf $0.50); "Low-Wage Industries and the Working Poor," *Poverty and Human Resources Abstract,* March-April 1968 (article).
3.3.20 Massachusetts Institute of Technology—Frazier Kellogg, No. 91–23–67–11 Computer-Based Job Matching Systems: An Exploration of the State of the Art and the Proposed Nationwide Matching System	CFSTI—PB 177563; ERIC—MP 000680 ($8.35, Mf $0.75); *Computer-Based Aids to the Placement Process,* Industrial Relations Section, Alfred P. Sloan School of Management, Massachusetts Institute of Technology ($2.00, monograph).
3.3.21 Michigan State University—James Riddle Hundley, Jr., No. 91–24–66–42 A Study of Interpersonal Relations Among Managers and Employees of Fruit and Vegetable Farms with Emphasis on Labor-Management Practices Utilized	CFSTI—PB 178536; MA—"Farm-Labor Relations in Michigan," *Farm Labor Developments,* September 1968 (summary).

Institution, Investigator(s), Grant No., and Title of Report	*Source of Copies (See abbreviation key and explanation, p. 147)*
3.3.22 Michigan, The University of—Dawn Day Wachtel, No. 91–24–67–05 The Working Poor	CFSTI—PB 178189; ERIC—MP 000555 ($6.30, Mf $0.50).
3.3.23 Michigan, The University of—Gordon Barhydt, No. 91–24–68–37 Feasibility Study of Centralized Information Services in Industrial Relations	
3.3.24 Michigan, The University of and Wayne State University—Jeffry Piker, No. 91–24–67–24 Entry Into the Labor Force: A Survey of Literature on the Experiences of Negro and White Youths	CFSTI—PB 178900; ERIC—MP 000560 ($14.95, Mf $1.25).
3.3.25 Minnesota, University of—Herbert G. Heneman, Jr., and George Seltzer, No. 91–25–67–10 Manpower Planning and Forecasting in the Firm: An Exploratory Probe	CFSTI—PB 179078.
3.3.26 Minnesota, University of—Edward Gross, No. 91–25–67–12 Report on Problems of Counseling Special Populations Pursuant to Government Manpower Programs	CFSTI—PB 177564; ERIC—MP 000626 ($1.35, Mf $0.25); *Employment Service Review,* January-February 1968 (summary).
3.3.27 Missouri, University of—Rex R. Campbell and Susan E. Mulvey, No. 91–27–66–02 Perception of Job Opportunities Among Low Income Groups in Missouri	CFSTI—PB 177868.
3.3.28 National Opinion Research Center—Richard Jaffe, Carolyn F. Huson, and Michael E. Schiltz, No. 91–15–66–01 College, Color, and Employment—Racial Differentials in Postgraduate Employment Among 1964 Graduates of Louisiana Colleges	CFSTI—PB 177556; ERIC—ED 015332 ($6.16, Mf $0.75).
3.3.29 New York, The Research Foundation of State University of, Albany—Haskel Benishay, No. 91–34–67–07 Development of Stochastic Labor Force and Working Life Models	"Stochastic Aspects of the Labor Force Process," *American Statistical Association, Proceedings of the Social Statistics Section, December 1967,* pp. 319–24; "Parameters and Relations of Stochastically Lagged and Disaggregative Time Series," *Econometrica,* January 1968.

Institution, Investigator(s), Grant No., and Title of Report	*Source of Copies (See abbreviation key and explanation, p. 147)*
3.3.30 New York University—Abraham L. Gitlow, No. 91–34–66–57 Conference on Unskilled Workers in the Labor Force: Problems and Proposals	CFSTI—PB 178416.
3.3.31 New York University—Jeanne L. Noble, No. 91–34–67–06 An Exploratory Study of Domestics' View of Their Working World (An Inquiry into the Methodology of a Research Design Formulated to Gather Information for a More Extensive Investigation)	CFSTI—PB 177865; ERIC—MP 000666 ($5.28, Mf $0.75).
3.3.32 Northeastern University—Jack Ferguson and David Grafstein, No. 91–23–67–49 A Pilot Study of Urban Career Patterns	CFSTI—PB 179851.
3.3.33 Northeastern University—Morris A. Horowitz and Harold M. Goldstein, No. 91–23–67–57 Hiring Standards for Paramedical Manpower	CFSTI—PB 179846.
3.3.34 Oakland Small Business Development Center, Inc.—Jack Brown, No. 91–05–67–29 A Study of the Manpower Implications of Small Business Financing—A Survey of 149 Minority and 202 Anglo-Owned Small Businesses in Oakland, Calif.	CFSTI—PB 178803.
3.3.35 Oregon, University of—Steven E. Deutsch, No. 91–39–68–17 Local Union Leadership and Technological Change	CFSTI—PB 178899.
3.3.36 Pennsylvania, University of—Ann R. Miller, No. 91–40–67–02 Current Occupation and Past Training of Adult Workers	CFSTI—PB 177866; ERIC—MP 000569 ($5.45, Mf $0.50); "Employment of Migrants," *Journal of American Statistical Association*, December 1967.
3.3.37 Purdue Research Foundation—Carolyn Cummings Perrucci, No. 91–16–66–28 Engineers and Scientists: A Comparative Analysis of Professional Values and Behavior	CFSTI—PB 178388; ERIC—MP 000596 ($4.40, Mf $0.50).

Institution, Investigator(s), Grant No., and Title of Report	*Source of Copies (See abbreviation key and explanation, p. 147)*
3.3.38 Purdue Research Foundation—Carolyn Cummings Perrucci, No. 91–16–67–43 The Female Engineer and Scientist: Factors Associated with the Pursuit of a Professional Career	CFSTI—PB 182149.
3.3.39 St. Mary's College—Svetozar Pejovich and William Sullivan, No. 91–25–66–04 The Role of Technical Schools in Improving the Skills and Earning Capacity of Rural Manpower: A Case Study	CFSTI—PB 177780; ERIC—ED 015329 ($1.04, Mf $0.25).
3.3.40 Sam Houston State College—George G. Killinger, No. 91–46–66–72 Job Obsolescence in the Law Enforcement and Correctional Field	CFSTI—PB 178234; ERIC—MP 000554 ($7.52, Mf $0.75).
3.3.41 Sonoma State College Foundation—Cheryl J. Petersen, No. 91–05–68–31 The California Farm Labor Force: A Profile—A Report Prepared for the California Legislature Assembly Committee on Agriculture by its Advisory Committee on Farm Labor Research with the Assistance of the California Department of Employment	CFSTI—PB 184263.
3.3.42 South Florida, University of—Dale O. Cloninger, No. 91–10–66–67 A Determination of the Extent of Participation of Significant But Nonpredominant Retiree Concentration in the Local Economy and Labor Force and Their Effect on Employment, Wage Rates, and Income	*Florida's Latent Resource: The Retired—Business and Economic Dimensions*, University of Florida Press, Gainesville, Fla.
3.3.43 Southern Illinois University—Herman R. Lantz and Ernest K. Alix, Nos. 91–15–66–34 and 91–15–67–50 A Study of the Relationship Between Resignation and Performance in a Job Retraining Program	CFSTI—PB 182513; Office of Research and Projects, Southern Illinois University, Carbondale, Ill. 62901 ($5.00).
3.3.44 Southern University and Agricultural and Mechanical College—Frederick C. Temple and Thomas T. Williams, No. 91–17–01 Employment Pattern of Southern University Graduates	CFSTI—PB 177872.

Institution, Investigator(s), Grant No., and Title of Report	*Source of Copies (See abbreviation key and explanation, p. 147)*
3.3.45 Temple University—Karen S. Koziara, No. 91–40–68–08 Labor Force Nonparticipation of Males in Urban Poor Areas	CFSTI—PB 183538.
3.3.46 Vermont, University of—Milton J. Nadworny, No. 91–44–07 Employment Expansion in the Burlington, Vt., Labor Area, 1965	
3.3.47 West Virginia University—Robert W. Miller, No. 91–52–66–56 Social Psychological Factors Associated with Responses to Retraining	CFSTI—PB 177864; ERIC—MP 000668 ($2.20, Mf $0.25); *Social Psychological Factors Associated with Responses to Retraining,* Institute for Labor Studies, West Virginia University Research Series No. 2.
3.3.48 Xavier University—Lois G. Taplin, No. 91–17–04 Employment Pattern of Xavier University Graduates of 1964	CFSTI—PB 177561.

3.4 LIST OF REPORTS COMPLETED, FISCAL YEARS 1963–69—Research Contracts Under the EOA and the SSA

Contractor, Investigator(s), Contract No., and Title of Report	***Source of Copies (See abbreviation key and explanation, p. 147)***
3.4.01 Arizona State University—Calvin Daane, No. 41–7–005–03 Developing Group Counseling Models for the Neighborhood Youth Corps	CFSTI—PB 182512.
3.4.02 National Analysts, Inc.—Gerald D. Robin, Nos. 41–7–001–40 and 81–40–66–18 An Assessment of the In-Public School Neighborhood Youth Corps Projects in Cincinnati and Detroit, with Special Reference to Summer-Only and Year-Round Enrollees (Interview Schedule Supplement)	CFSTI—PB 183081; CFSTI—PB 183082 (Interview Schedule Supplement).
3.4.03 New York, State University of, Buffalo—John E. Drotning, David B. Lipsky, and Myron D. Fottler, No. 41–8–005–34 Jobs, Education, and Training: Research of a Project Combining On-the-Job and Literacy Training for the Disadvantaged, phase I	CFSTI—PB 183331.
3.4.04 North Star Research and Development Institute—Guy H. Miles, No. 41–7–006–25 Phase I—Optimizing the Benefits of Neighborhood Youth Corps Projects for Rural Youth	CFSTI—PB 184977; MA—"The Neighborhood Youth Corps in Rural Areas," *Farm Labor Developments*, March 1969 (articles).
3.4.05 North Star Research and Development Institute—Guy H. Miles, No. 41–7–006–25 Survey of Recent Literature Relevant to Optimizing the Benefits of Neighborhood Youth Corps Projects for Rural Youth	CFSTI—PB 184980.
3.4.06 Rice University—Edwin Harwood and Robert Olasov, No. 41–7–003–46 Houston's Out-of-School Neighborhood Youth Corps: A Comparative Observational Study of the NYC's Impact on the Work Attitudes and Job Futures of Poverty Youths	CFSTI—PB 184978.

SECTION 4. GUIDELINES FOR SUBMISSION OF RESEARCH PROPOSALS

These guidelines have been **revised** and supersede any previously issued. It is suggested that applicants study title I of the Manpower Development and Training Act, as amended (see appendix B), and other relevant authorizing legislation **before** preparing proposals under these guidelines. This section includes guidelines for submission of proposals for research or evaluation contracts and manpower research institutional grants, doctoral dissertation grants, and research project grants under the MDTA.

U.S. DEPARTMENT OF LABOR
MANPOWER ADMINISTRATION

4.1 GUIDELINES FOR SUBMISSION OF RESEARCH PROPOSALS— Research or Evaluation Contracts

The purpose of this section is to describe guidelines for the submission of proposals for research and evaluation contracts that may be obtained from the Manpower Administration, U.S. Department of Labor.[1]

CONTRACTING AUTHORITY

Contracts may be awarded under authority of three legislative acts:

1. Title I of the Manpower Development and Training Act (42 U.S.C. 2571 et seq.), for the conduct of research in the broad areas of manpower resources, requirements, development, utilization, mobility, and employment and unemployment, and automation and technological change, to provide information which will lead to the development of informed and responsible manpower policies and programs.

2. Title I of the Economic Opportunity Act of 1964 (42 U.S.C. 2740 and 2763), for studies that will provide information which will improve the overall effectiveness of the Neighborhood Youth Corps (part B, section 123(a) (1) and (2)); Operation Mainstream (part B, section 123(a)(3)); New Careers (part B, section 123(a)(4)); Concentrated Employment Program (part B, section 123(a)(5)); or the Special Impact Program (part D).

3. Social Security Act (81 Stat. 888), for studies which will provide information for the improvement of the overall effectiveness of the Work Incentive Program (title IV, part C, section 441).

Academic institutions, State and local government organizations, and other organizations and individuals from all of the social science disciplines with research capabilities in the manpower area may apply for contracts to conduct research or evaluation.

PRELIMINARY PROPOSAL

The first step in applying for a research or evaluation contract is the submission of a brief statement describing the researcher's basic study ideas.

The preliminary proposal should be two or three pages in length, and in nontechnical language. It should present:

1. The problem to be investigated.

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[1] See Title 29, Part 71 of the Code of Federal Regulations, Manpower Research and Evaluation Grants and Contracts. 33 F.R. 7113.

2. Objectives of the study.
3. Research procedures.
4. Time and budget requirements (summary only).

A separate statement concerning staff, facilities, capabilities for research, and previous related research experience should accompany the preliminary proposal. The preliminary proposal and any other related materials should be sent to:

Office of the Associate Manpower Administrator
for Policy, Evaluation, and Research
Manpower Administration
U.S. Department of Labor
Washington, D.C. 20210

After reviewing this preliminary summary, the Manpower Administration may request a formal research proposal. (Formal proposals should follow the outline described below in Outline for Submission of Formal Proposals.)

GENERAL INFORMATION ABOUT REQUIREMENTS FOR FORMAL PROPOSALS

The proposed research should focus on solutions to significant manpower problems. It should seek to develop new knowledge or new applications of existing knowledge which give promise of furthering the objectives of the legislation under which the contract would be authorized.

The end product of the study—its findings and conclusions—should be of broad program interest. Studies may be limited to special areas *only* where they can be shown to provide a basis for generalized conclusions or to have application over a wide area.

Research Capability

The director or principal investigator must either have done successful research on the subject or have clearly demonstrated competence for performing or directing such research. The organization or individual submitting the proposal must have available facilities and staff adequate for carrying out the research.

Economic Efficiency

The probable value of the results of the overall study must justify the total proposed expenditure. The overall cost of the particular approach to solving the problem in the proposed study must be reasonable as compared with the cost of other possible approaches. Projects should not duplicate ongoing research, and whenever possible should attempt to build on completed studies.

Review of Proposals

Formal proposals should be typed or otherwise reproduced on one side only and should run about eight to 10 pages in length. Thirty copies are required.

Proposals may be submitted at any time, and will be reviewed as quickly as possible. Acknowledgment of receipt will usually be made within 15 days. Departmental processing, review, and evaluation of comments received usually require 60 days from receipt of proposal.

Notice of approval for negotiation (or disapproval) will be given as soon as possible following review and evaluation. Final approval for contracting will depend on a negotiated argeement on content, structure, and budget of the project by the organization and the Manpower Administration.

Final Research Report

Upon completion of a research contract, 225 copies of a final report are required. This report will present and analyze the information secured in the course of the project and, in addition, will include separate chapters covering: (1) A summary, (2) findings and conclusions, (3) implications for manpower program and policy, and (4) implications for further research. The report chapter covering implications of the research for manpower policy and program should include recommendations for the use and application of the findings.

In the case of manpower research contracts, publications derived from research conducted under the contract will acknowledge that the study was supported by the Manpower Administration, U.S. Department of Labor. The Department will have a nonexclusive right to publish and distribute the final report of the research, and to use the findings, including any research designs developed, for any purpose whatsoever.

OUTLINE FOR SUBMISSION OF FORMAL PROPOSALS

There is no printed form to be used. Follow the outline below in describing the proposed project. Identify each section by number and title as indicated in the outline.

1. Cover sheet. The cover sheet of the proposal must show the following information in the order indicated:

> PROPOSAL SUBMITTED TO THE ASSOCIATE MANPOWER ADMINISTRATOR FOR POLICY, EVALUATION, AND RESEARCH, MANPOWER ADMINISTRATION, U.S. DEPARTMENT OF LABOR, FOR THE CONDUCT OF A RESEARCH PROJECT UNDER THE PROVISIONS OF (appropriate title and act of Congress).

Project title:	(Be concise, descriptive, and as specific as possible. Avoid obscure technical terms. Include key words under which project may be indexed.)
Submitted by:	(Name of organization, institution, agency, or individual hereinafter referred to as "organization.")
Address:	(Of organization, including zip code.)
Telephone number:	(Of organization. Include area code.)
Initiated by:	(Full name and position of individual who is initiating project, ordinarily the director or chief investigator.)
Transmitted by:	(Full name and position of official who is approving the submission of the proposal. This must be someone with authority to commit the organization to the proposed project. The proposal should be signed by both the initiator and the transmitter on the original or master copy.)
Date:	(Date transmitted.)

2. Abstract. On a single, separate page submit a summary of the proposal under two main heads: (a) Objectives, and (b) procedures.

3. Problem. State the problem to be investigated, explaining its importance and significance in relationship to the objective of the relevant authorizing legislation.

4. Objectives. Clearly state the hypotheses to be tested or the specific questions to be answered.

5. Relationship to other research. Discuss the proposed study in relation to previous or ongoing research or evaluation in related areas, and indicate how the proposed study will extend the body of knowledge about these areas. Point out what will be distinctive or different about the proposed study as compared with previous studies, and in what ways it may suggest or lend support to programs for action in the manpower area.

6. Procedure. Describe the research procedure in detail, listing the steps to be followed. Where pertinent, include specific information on each of the following:

a. Research method. What is the method to be employed in the study? Examples: survey method, descriptive-theoretical analysis, participant observation, experimental and control group comparisons, etc.

b. Study subjects. Where there are populations, samples, experimental and control groups, indicate their purpose, origin, composition, size, types of data to be collected on each, sampling plans, etc.

c. Data collection. Describe types of data to be gathered and methods of collection. To the extent feasible, data that are already available or are being collected from other sources must be used. Sources of such data should be indicated. Describe questionnaires, interview guides, tests, and other research instruments to be used.

In studies for which it is determined that the project is subject to the requirements of the Federal Reports Act of 1942, it will be necessary for the researcher to submit copies of questionnaires and survey plans for clearance in advance of their use.

d. Analytic techniques. Indicate statistical or other analytic techniques to be used in testing the hypotheses or achieving the objectives of the study.

e. Phasing. Indicate approximate time schedule for various aspects or phases of the project.

7. Personnel. Give name, title, and a statement of the research experience of the principal investigator and other key personnel.

8. Facilities. Indicate special facilities and similar advantages, including research staff resources, available to the organization.

9. Duration. Estimate total time for the project and indicate beginning and ending dates.

10. Other information. Indicate other pertinent information including the following:

a. Extent of agreed cooperation in the project by agencies whose support is necessary for the successful accomplishment of objectives. Include names and titles of officials of such agencies giving assurance of cooperation. For example, in various types of research projects, cooperation of cognizant organizations concerned with the Neighborhood Youth Corps program, the Concentrated Employment Program, and the State employment security agency may be vital.

b. Amount of financial or other support available for this project from other sources.

c. Whether this proposal is an extension or an addition to a previous Government-supported project.

d. Whether financial support for this proposal or a similar one has been requested from any Government or private organization other than the Manpower Administration, U.S. Department of Labor.

11. Budget. Start this section on a new page, identifying it in sequence with previous sections as "11. Budget." The budget will include all estimated costs to be covered by any contract with the Department of Labor.

The cost of performance of a contract includes the costs of necessary direct items of expenditure incurred in the performance of the contract. It should also include an amount for overhead or indirect costs, as appropriate.

Following the categories as shown in the outline below, and rounding all amounts to the nearest dollar, list anticipated requirements for all items of expenditure. If the project is expected to extend beyond 12 months, indicate amount required for each year, and in total.

a. Direct costs.
  (1) Personal services.
    (a) Include salaries and wages of all personnel directly attributable to actual performance under this contract, whether on a full- or part-time basis. List personnel by title, man-months (full- or part-time—be specific), and dollar amounts.
    (b) Include, in connection with the above, but identify separately, allowances (dollar amounts and percentages of base salaries) for vacation, holidays, sick leave pay, and any other employee benefits customarily granted.
  (2) Consultants. Include allowances for consultants as required.
  (3) Materials and supplies. List all materials and supplies which will be directly expended by the contractor in performance of the contract.
  (4) Travel. Furnish estimates of the number of trips, method of transportation, and cost of travel. Include the estimated amount for subsistence and daily allowance rates, auto mileage rates, etc., during travel, in accordance with the contractor's established policy.
  (5) Communications. Include telephone, telegraph, and postal charges.
  (6) Services. Include those not specifically covered under personal services (e.g., interviewer cost, computer cost). When a study involves securing information through Federal agencies (as U.S. Bureau of the Census) or State agencies (as State employment services), the cost of such services should be included.
  (7) Other. Itemized by category and amount.

b. Indirect costs or overhead. Give the basis for the determination of proposed overhead rate and reference to other current Government contracts, if any.

Overhead rates may be fixed during the negotiation of a contract, or may be determined provisionally, with final settlement made at the conclusion of the contract. If an overhead rate has been established by a Government audit agency, identify the cognizant audit agency and contact person, the rate established, the allocation base, and the period for which established.

If the division between direct and indirect costs as outlined above differs from the contractor's established accounting system and procedures for allocating such costs, the contractor's system may be followed and the differences will be considered in negotiating an equitable percentage to be applied in the contract. It is most important that all items of cost be readily identifiable regardless of whether they are shown as direct or indirect.

The proposed budget will be reviewed against applicable Federal regulations as part of the initial review. Where changes are necessary for projects which are otherwise approved for negotiation, these changes, as well as decisions concerning the determination of an overhead rate, will be made during the negotiation of the contract.

U.S. DEPARTMENT OF LABOR
MANPOWER ADMINISTRATION

4.2 GUIDELINES FOR SUBMISSION OF RESEARCH PROPOSALS—Manpower Research Institutional Grants Under the MDTA

BACKGROUND INFORMATION

Since July 1, 1966, the U.S. Department of Labor has provided Manpower Research Institutional Grants to seven academic institutions to assist them in strengthening their activities in the manpower field. Major objectives of this grant program have been to increase the number of institutions engaged in continuing research on manpower problems and the number of research specialists concentrating on manpower problems.

The grant funds provided these seven schools have been used largely to augment staff, conduct manpower research, introduce new manpower courses and curriculums, and attract high quality students to the manpower field. The programs of these schools and their progress in meeting program objectives during the 3 years through June 30, 1969, are described in *The Manpower Research Institutional Grant Program: The First Three Years,* which may be obtained from the Department of Labor.

Under the terms of the original grants, support beyond the third year was dependent on the availability of funds and the results of an indepth evaluation of the individual programs. The committee of outside experts which visited the seven schools and evaluated their programs recommended continuing but decreasing support of these schools over an additional 2-year period in which further support was allowable. By the end of that period, it was expected that the institutions would be able to find other support for their ongoing programs.

With the phasing out of grant support to the present seven schools, funds are being made available to assist 10 other schools in the development of similar programs. These schools will be selected from among the eligible institutions submitting proposals in accordance with these guidelines.

INSTITUTIONAL ELIGIBILITY

Institutions of higher education in any of the States of the United States, its territories, or possessions may apply if they grant bachelor's or higher degrees in the social or behavioral sciences, in social work, or in any other disciplines relevant to manpower research.

SCOPE OF THE GRANT PROGRAM

The limited funds available for this program restrict both the number and size of grants to be awarded. Ten institutions are to receive grants for a 4-year period, starting on or about August 1, 1970. Unless additional funds become available, no other institutions will be brought into the program until, at the earliest, August 1974.

The grant for the first year, not to exceed $37,500 per grantee institution, is intended to be used for development of the full-scale program to be conducted in the second and following years. As part of the developmental year, the Department of Labor will conduct a 2-3 week seminar during midsummer 1970 in Washington, D.C., at which representatives of those Federal agencies which have significant activities related to manpower research will discuss their programs, sources of data, publications, and other information which may be useful to the grantee institutions. Each grantee institution will be expected to send to the seminar two top-level staff members involved in the grant program. Grant funds may be used by the grantee institutions to cover travel, subsistence pay, and other authorized costs of attendance at the seminar. Attendance at future annual seminars arranged by the Department of Labor will also be expected of staff members involved in the grant program.

During the latter 3 years of the grant program, it is anticipated that annual awards will be made, not to exceed $75,000 per institution per year. These continuing awards will be contingent on the availability of appropriated funds and on reasonable progress of the grantees' programs. Each such annual award will require at a reasonable time before the end of the then-current grant period the submission of a progress report, and a plan and proposed budget for the next period.

PROGRAM DIRECTION

It will be expected that a full-time staff member, recognized as competent to guide research and training in the manpower field, will be named as director of each grantee institution's program. Continuation of the grant beyond the first year will be contingent on the appointment and employment of such a full-time director and his employment full time in grant activities.

Where neighboring institutions wish to pool efforts—as in training researchers, planning and conducting long-term research programs, or developing programs about regional or local manpower problems—one institution should take responsibility for submitting the overall proposal and administering the grant, if approved. The director should be on the staff of the administering institution. The agreed participation of other institutions should be documented in the application, and progress reports should include activities of all participants in the program.

OBJECTIVES AND CRITERIA FOR SELECTION

A primary consideration in the approval of any grant request is the relevance of the total program to the objectives of title I of the Manpower Development and Training Act of 1962, as amended. (See appendix B.)

All proposals which are relevant to the act will be considered initially by a special panel of manpower experts from outside the Department of Labor. The criteria on which the panel will evaluate applications stem directly from the objectives of the Manpower Research Institutional Grant Program, as follows:

1. To support systematic, long-range programs of manpower research;

2. To stimulate greater interest in the manpower field by established scholars;

3. To develop additional research talent with interest in the manpower area;

4. To encourage greater cooperation among the various behavioral sciences in the conduct of human resources research;

5. To stimulate the development and exploration of new ideas for solving manpower problems;

6. To undertake continuing programs for the dissemination of manpower research results which may have application to operating programs and contribute to the clarification of manpower issues;

7. To introduce manpower courses and curriculums;

8. To develop within appropriate academic institutions resources and capabilities for providing technical support to local and regional organizations concerned with manpower problems; and

9. To assist the Department of Labor in making policy and operating decisions based on the information and experience developed through research.

It is expected that one recipient school will be selected from each of the Department's regions of the country, as follows:

Region I—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

Region II—New Jersey, New York, the Canal Zone, Puerto Rico, and the Virgin Islands.

Region III—Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia.

Region IV—Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.

Region V—Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin.

Region VI—Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

Region VII—Iowa, Kansas, Missouri, and Nebraska.

Region VIII—Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

Region IX—Arizona, California, Hawaii, Nevada, American Samoa, and the Trust Territories.

Region X—Alaska, Idaho, Oregon, and Washington.

Grants will be recommended for those applicant institutions which, in the opinion of the panel, have the greatest possibility of serving the overall purposes of the Department in this program by developing instruction and research capability in the manpower field. Innovative approaches will be welcomed. For example, a grantee institution might focus its resources on developing techniques for utilizing completed manpower research or on training specialists in applying manpower research.

GRANT CONDITIONS

Grant funds may be expended only for the purpose of carrying out the research program as approved. In accordance with the Bureau of the Budget Circular No. A-74 dated December 13, 1965, "Participation in the costs of research supported by Federal grants," the grantee institution must share in the total cost of the project on "more than a token basis."

All grant awards are subject to the condition that the director who is designated in the application for the first year continues to be responsible for the conduct of the approved program until the end of the year, or until such time in that year as a full-time director, approved by the Department of Labor, is appointed. Awards of grants in subsequent years are subject to the condition that there be a full-time director, approved by the Department, in charge of the grant program. In the event the director becomes unavailable on a full-time basis, continuation of the grant will be contingent on the Department's written approval of the replacement chosen by the grantee.

For applications which are approved, 10 reproduced copies of each final report of research conducted under the grant will be required.

Any survey plans, surveys, or questionnaires arising from the research under an approved grant will be identified solely as the responsibility of the grantee and will in no way be attributed to the Department of Labor.

Publications based on the research conducted under the grant will acknowledge that the research was supported by a grant from the Manpower Administration of the U.S. Department of Labor under the Manpower Development and Training Act of 1962, as amended. The Department will have a nonexclusive right to publish and distribute the final report of the research, and to use the findings, including any research data or designs developed by the research, for any purpose whatsoever.

The standard conditions applying to all institutional grants appear at the end of these guidelines. As indicated below, any necessary exceptions from these conditions should be requested with the transmittal of the application.

SUBMISSION OF APPLICATIONS

Twenty copies of each application should be sent to:

Director, Office of Manpower Research
Manpower Administration
U.S. Department of Labor
Washington, D.C. 20210

The closing date for submission of applications is **December 1, 1969.** (Applications postmarked on or before that date will be accepted.) Processing of applications requires approximately **2 months**, including evaluation by a special review panel. Applicants will be informed of the results of the review as soon as possible thereafter. Applications approved for funding will be effective about August 1, 1970.

THE APPLICATION

Applications should contain the information requested in the order indicated. There is no printed form to be used.

1. The first page should show the following:

PROPOSAL SUBMITTED TO THE ASSOCIATE MANPOWER ADMINISTRATOR FOR POLICY, EVALUATION, AND RESEARCH, MANPOWER ADMINISTRATION, U.S. DEPARTMENT OF LABOR, FOR A MANPOWER RESEARCH INSTITUTIONAL GRANT UNDER THE PROVISIONS OF TITLE I OF THE MANPOWER DEVELOPMENT AND TRAINING ACT OF 1962, PUBLIC LAW 87-415, AS AMENDED (42 U.S.C. 2571).

Title of proposed program:	(Be concise, descriptive, and as specific as possible.)
Submitted by:	(Legal name of institution or organization which will be used if grant is approved, hereinafter referred to as "institution.")
Address:	(Of institution, including zip code.)
Telephone number:	(Of institution, including area code.)
Program director:	(Name, title, academic degrees, and phone number of the program director. Unless otherwise indicated, all correspondence concerning this request, including the Institutional Grant Award, if approved, will be addressed to this official.)
Transmitted by:	(Name, title, and phone number of official who is approving the submission of the proposal. This must be someone with authority to commit the institution to the proposed project.)
Fiscal officer:	(Name, title, mailing address, and phone number of the official authorized by the institution to receive Federal funds on its behalf.) (The proposal should be signed by both the program director and the transmitter on the original or master copy.)

Budget summary—first year:

Total Federal Funds Requested . . . . $________________
Total Other Funds . . . . $________________
Total of All Funds . . . . $________________

Duration: Beginning Date: August 1, 1970; Ending Date: July 31, 1971.

Date transmitted: ____________________________

2. The proposed program. Each applicant institution is expected to appraise its own strengths and needs and to propose a plan providing the environment essential for development of a manpower program. The plan might involve the strengthening of a single activity, or a group of related interdisciplinary or interinstitutional activities. The information requested below should be included. (There will be no opportunity to augment or revise the information furnished in the application.)

   a. Background information on the institution. Send two copies of current catalogs covering the programs of the relevant departments, including catalogs of cooperating institutions, if applicable. To the extent that other information specified below is available in brochures or other published materials, send six copies of such publications. As a minimum, the following information should be included in either the publications or this section of the application:

      (1) Total enrollment (full- and part-time) by number of students taking work creditable toward a bachelor's or higher degree.

      (2) Enrollment of students in manpower-related disciplines by level (graduate or undergraduate).

      (3) Degrees offered, by level and by disciplines relevant to manpower research; and number of such degrees awarded in recent years, by year.

      (4) Kind and number of courses currently offered which relate to manpower research.

      (5) Any other information which may be helpful in assessing the capabilities of the institution for carrying out the objectives of the Institutional Grant Program.

   b. The proposed plan. Describe fully, explaining how it may be related to any other developmental plans for the institution, and how each element (such as faculty, other personnel, expenditures, curriculum, degree programs, research, organization, etc.) in the grant-supported program would relate to the current corresponding element. Include a description of specific plans for the first developmental year and the broader aims of the following 3 years. Where other academic institutions are involved, or where contemplated research would involve nonacademic organizations, indicate extent to which agreement has been reached with these other institutions or organizations. The following information should be included in this section of the application:

      (1) Personnel requirements (faculty, staff, and other) of the proposed program. Compare current resources of the institution to proposed needs.

      (2) Biographical information on the program director and the faculty members expected to participate in the plan.

      (3) Number of student research assistants, fellows, etc., to be systematically employed and supported under the grant; relate to current support programs, if any.

      (4) Any information on other resources of the institution (such as faculty in other departments) which may be expected to assist in the implementation of the plan.

      (5) Proposed research program, specifying subject areas of concern and suggesting individual projects contemplated.

c. Continuation of the program. Describe how the institution intends to maintain the projected level of activity when Department of Labor support is terminated.

3. Budget. Include a section on estimated costs of the project to be covered by the grant and by the grantee institution from non-Federal sources. Start this section on a new page.

The proposed budget will be reviewed against applicable Federal regulations, such as 41 CFR 1-15.3 and Bureau of the Budget Circulars Nos. A-74 and A-88, as part of the review of the application. Where changes are necessary for projects which are otherwise approved, final approval will be conditional on the acceptance of these changes.

The cost of the project includes the costs of necessary direct items of expenditures incurred in its performance; it may also include an amount of overhead or indirect costs at a rate which does not exceed the grantee institution's established audited rate for such projects. Total Federal costs to be covered by the grant may not exceed those indicated under "Scope of the Grant Program" above; i.e., not more than $37,500 for the first year, and not more than $75,000 each for the following 3 years.

Following the categories shown in the budget format below, and rounding all amounts to the nearest dollar, list first-year anticipated requirements for all items of expenditure in two columns: (1) Amount of funds requested; and (2) amount of the grantee institution's contribution from non-Federal funds. Indicate total amounts required for each year and for the 4-year total as provided below.

BUDGET FOR MANPOWER RESEARCH INSTITUTIONAL GRANT

Under title I, MDTA, as amended (42 U.S.C. 2571)

SUBMITTED BY: Official Name and Address (including zip code) of the Applicant Institution.

DURATION OF BUDGET: Beginning Date: August 1, 1970; Ending Date: July 31, 1971.

NOTE: Salaries, service charges, travel costs, etc., must conform to the standard rates of the institution, within any maximum limitations indicated.

Item	Amount Required for Program Grant Funds	 Non-Federal Funds
Direct Costs. Direct costs are those that are specifically incurred in the conduct of the program under the grant. These may include the following:		
a. *Compensation for Personal Services:*		

	Amount Required for Program	
Item	Grant Funds	Non-Federal Funds
(1) Include salaries, wages, and stipends for all personnel attributable to the program. Such compensation shall be charged at actual rates as paid by the applicant institution.		
(2) Where any person works less than full time on the program, reasonable estimates of time spent on the program may be used in determining the part of the salary to be charged to the program. List all position titles, and state the percentage of time on the program and the per annum salary for each person. Where known, the name of the individual filling that position title will be designated.		
b. *Employee Services and Benefits:*		
Identify by the type and percentage base on which the cost is computed each service and benefit customarily provided by the applicant institution. These should include such things as insurance, Social Security, deferred compensation, etc.		
c. *Consultants:*		
(1) Fee. When consultants are to be used, the established criteria and fee normally adhered to by the applicant institution will be used. This will be reflected by the consultant specialty to be used, the name of the consultant (when known), the number of hours or days of service, and the rate per hour or day.		
(2) Per diem and travel. Indicate the rate per day, the number of days for per diem, the points of travel, and the basis for computation (i.e., tourist class, round trip, air fare from and to destination) and/or mileage and rate per mile using private vehicle from and to destination. Rates will be based on established rates of the applicant institution.		
d. *Supplies and Materials:*		
Amounts required for ordinary operating supplies and materials should be indicated.		

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	Amount Required for Program	
Item	Grant Funds	Non-Federal Funds
e. *Travel and Per Diem (Other than Consultants):*		
(1) Per diem. See breakdown required under "Consultants."		
(2) Travel. See breakdown under "Consultants."		
f. *Communications:* Include long distance telephone calls, telegrams, and postage which are directly attributable to and necessary for the implementation and conduct of the grant.		
g. *Services:* Itemize requirements for all services to be performed in conjunction with the grant not specifically covered in items a, b, or c above.		
h. *Other:* Itemize by category other essential items not listed above.		
Subtotal	$________	$________
Indirect Costs. These reflect the institution's negotiated and Government-approved provisional overhead by percentage and the base on which this cost is computed; e.g., all direct costs less consultant costs or all direct salaries as may be applicable to the applicant institution. These overhead costs may be reflected as the applicant institution's contribution to the program.		
Subtotal	$________	$________
Total Estimated Cost of the Grant (1st year)	$________	$________
Estimated Totals for: 2nd year	$________	$________
3rd year	$________	$________
4th year	$________	$________
4-YEAR TOTAL	$________	$________

4. Include a statement acknowledging that the Manpower Research Institutional Grant Conditions (which follow) have been reviewed and will be accepted if the grant is approved. If there are any provisions from which the institution requires exception, these should be requested and justified.

MANPOWER RESEARCH INSTITUTIONAL GRANT CONDITIONS UNDER THE MANPOWER DEVELOPMENT AND TRAINING ACT OF 1962, AS AMENDED

1. DEFINITIONS

As used in this grant (see Institutional Grant Award, p. 217), the following terms shall have the meaning set forth below:

a. "Secretary" means the Secretary of the U.S. Department of Labor, and the term "his duly authorized representative" means any person or persons authorized to act for the Secretary.

b. "Grantee" means the institution named in this grant as the recipient of the grant award.

c. "Grant Officer" means the person executing this grant document on behalf of the Government, and any other individual who is properly designated a representative of the grant officer and acting within the limits of his authority.

d. "MA" means the Manpower Administration of the U.S. Department of Labor.

2. APPLICABILITY OF CONDITIONS

These conditions shall be applicable to the grantee, and to any agency or organization which, pursuant to a contract, agreement, or other arrangement with the grantee, undertakes responsibility for any part of this grant. Exceptions to these conditions may be requested in cases where compliance with one or more of them would cause unnecessary difficulties in carrying out the approved project. A waiver of any condition must be in writing and must be signed by the grant officer. Any such waiver must be explicit; no waiver may be inferred from the fact that the grant is responsive to an application which may have contained material inconsistent with one or more of these conditions.

3. OPTION TO RENEW, PERIOD OF GRANT, AND FUNDING

a. This is expected to be a 4-year program and it is the intent of the Government to fund the grant in annual increments dependent upon the availability of appropriated funds for this purpose and the grantee's program progress.

b. The first funding phase of this 4-year program is for the period August 1970 through and inclusive of July 1971.

c. The three remaining phases and subsequent funding of each phase will be at the option of the Government, subject to the evaluation of progress made as reflected in progress reports (see condition 18) submitted by the grantee and in onsite visits. Notification of the Government option to renew under this term shall be furnished to the grantee in writing and will stipulate that adequate funds have been appropriated by Congress and that the Government desires to continue the grant period for the next phase of the grant. Such notification of the Government's intent to exercise its option shall be furnished to the grantee at least 90 days prior to the completion date of the grant. The grantee will acknowledge receipt and acceptance of the Government's option to renew by submitting an estimated cost proposal, to arrive in the office of the grant officer not less than 60 days prior to the completion date of the grant, or at such earlier date as the grant officer may specify in the Government's notification of intent to renew.

d. Upon acceptance of the cost proposal by the grant officer, the grant will be modified in writing. Any such modification will be construed to contain this option to renew condition.

4. SCOPE OF WORK

The work and/or services which the grantee shall perform shall be consistent with the proposal as approved for support by the grant officer and shall be performed in accordance with that document which is appended as Attachment 1 to the Institutional Grant Award.

5. AMOUNT OF GRANT

The amount of the Federal grant shall not exceed the smaller of (a) the "Total Amount of This Grant" shown in the Institutional Grant Award, or (b) the amount of cash expenditures (other than grantee contributions) made by the grantee for project purposes during the grant period. For this purpose, the amount of cash expenditures shall include only expenses which are chargeable to the budget of the grantee and which are determined by the grant officer to be allowable costs under the applicable provisions of subpart 1-15.3 of the Federal Procurement Regulations (41 CFR 1-15.3).

6. USE OF GRANT FUNDS

Grant funds shall be expended only for the purpose and activities of the approved project. Adjustments within the approved budget may be made by the grantee without prior approval by the grant officer, provided the total expenditures do not exceed the amount of the grant and the total pay and rate of pay of principal professional staff are not increased. Expenses which are attributable only in part to this project shall be prorated on a reasonable and consistent basis to determine the amount chargeable to the activities supported by this grant. The following statement, signed by the authorized university or college official, will accompany the final fiscal report:

> "I certify that all payments and expenditures reported are for proper grant purposes and in accordance with the approved budgets set forth in the grant documents."

7. OBLIGATION OF GRANT FUNDS

Grant funds may not be obligated prior to or after the grant period. Obligations outstanding as of the end of the grant period may be liquidated (paid out) after the end of the grant period. Such obligations shall involve only specified commitments for which a need existed in the grant period and which are supported by approved contracts, purchase orders, requisitions, invoices, bills, or other evidence of liability consistent with the grantee's purchasing procedures and incurred within the grant period. All obligations incurred during the grant period shall be liquidated within 3 calendar months after the end of the grant period, if practicable.

8. PAYMENTS UNDER THE GRANT

Payments under the grant will be made as follows:

a. The initial payment will be made in the amount set forth on the cover sheet;

b. Subsequent payments hereunder will be made in accordance with the schedule attached to these conditions.

9. UNOBLIGATED FUNDS

Funds remaining unobligated at the end of the grant period cannot be transferred to another grant. The amount of the free or unobligated balance remaining at the end of the grant period shall be returned to the U.S. Department of Labor when the final financial report for the grant period is submitted. If savings occur in the liquidation of obligations outstanding at the end of the grant period, these become part of the unobligated balance.

10. TRAVEL EXPENSES

Expenses charged for travel shall be governed by the following:

a. Local travel by public carrier at actual costs and by privately owned automobile at the grantee's usual rate;

b. Out-of-town travel at the actual costs of rail or air fare, plus actual costs of subsistence, but not to exceed those allowable under the customary practice of the grantee, except that air travel shall be at less than first class where practicable.

11. SALARIES AND WAGES

The current policies of the grantee institution with respect to administration of salary and wages shall be applied to salaries and wages payable under this grant. The term "administration of salary and wage scales" is interpreted to mean hours of work, overtime rates, outside activities, general wage increases, and individual promotions. Consultants shall be paid at the prevailing rates, established by the institution. In exceptional cases where the required caliber of services cannot be obtained at the prevailing rates, a request to pay a higher rate with justification therefor shall be submitted to the grant officer for consideration and prior approval before the commitment is made.

12. ESTIMATE OF TIME OR EFFORT

The grantee shall maintain quarterly "Time or Effort Reports" for all professional staff rendering services under the grant. Such reports shall be prepared not later than 1 month following the end of the academic term within which the services were rendered. The estimate may be based on either hours or a percentage of effort. The estimate may be prepared by either the professional staff member himself or his supervisor and retained in the office of the individual responsible for preparation of expenditure reports. The "Time or Effort Reports" shall be available for inspection at any time by representatives of the Government.

13. LEASE-PURCHASE AGREEMENT

The grantee shall not, while using Federal funds in the performance of this grant, lease either real or personal property under terms providing, among other things, for the option to apply rent in whole or in part toward the purchase of the property being leased without prior written consent of the grant officer. Moreover, the grantee agrees to have the substance of this clause inserted in any subcontract or equivalent instrument entered into in performance of the grant.

14. EXPENSES DISALLOWED

No project funds shall be expended for:

a. The purchase of land, or any interest therein; the acquisition or construction of facilities; or the procurement of passenger-carrying vehicles;

b. The cost of meals for employees or officials of the grantee except when in travel status; or

c. Costs incurred before or after the grant period.

15. INTEREST EARNED ON FEDERAL FUNDS

All interest earned on Federal grant funds shall be reported on the financial report for the grant period and shall be returned by check payable to the U.S. Department of Labor.

16. ACCOUNTING FOR PROPERTY

Title to all property furnished by the Government or acquired with grant funds remains in the Government. Upon completion of the project, the grantee shall make a report to MA itemizing all nonconsumable property acquired with grant funds. The grant officer at that time will determine the disposition to be made of such property.

17. ACCOUNTING PROCEDURES AND AUDIT

Accounting for grant funds will be in acordance with grantee institution accounting practices, consistently applied, regardless of the source of funds. Itemization of all supporting records of grant expenditures, including grantee contributions, must be in sufficient detail to show the exact nature of the expenditures. As required by the Bureau of the Budget Circular A-74, December 13, 1965, the grantee's contribution to the project shall be not less in proportion to the total actual charges against the grant than the ratio indicated in the approved budget. Records must be available for audit by Government representatives and must be retained for 3 years after expiration of the grant or until grantee is notified by the grant officer that they may be disposed of.

18. PROGRESS REPORTS AND INSPECTIONS

Grantee will submit five copies of a progress report at the end of the month of March in the grant period and will arrange for onsite inspections by the grant officer or MA at their request. The reports will cover the work done under the grant including implications, conclusions, and recommendations resulting from research performed under this grant.

19. QUESTIONNAIRE APPROVAL

No questionnaire or survey plan shall be identified as a Government study or Government-approved study, unless the grantee submits to the grant officer copies of said questionnaires and survey plans for clearance in advance of use, in accordance with the Federal Reports Act of 1942.

20. RIGHTS TO AND DISPOSITION OF DATA

The grantee may publish, cause to be published, or distribute for public consumption any information concerning the results or conclusions of research conducted under this grant, unless requested by the grant officer to withhold publication for a given period, up to 90 days, after completion of the research. Thereafter the grantee may publish or permit others to publish such information, without prior review by the grant officer, provided that such publications contain the following acknowledgment:

> "The material in this report was prepared under a grant from the Manpower Administration, U.S. Department of Labor, under the authority of title I of the Manpower Development and Training Act of 1962, as amended. Researchers undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment. Therefore, points of view or opinions stated in this document do not necessarily represent the official position or policy of the Department of Labor."

Grantee agrees to furnish 10 copies of each such publication to MA, and agrees that the Government may, to the extent that the grantee has power to grant such rights, duplicate, use, and disclose in any manner and for any purpose whatsoever, and have others so do, all data procured or reports delivered under this grant. It is understood that the grantee may not be required to disclose material of a confidential nature to the Government even though such material has been collected in the performance of this grant. If the grant results in a book or other copyrightable material, the author is free to copyright the work, but the grantee agrees that the Government reserves a royalty-free, nonexclusive, and irrevocable license to reproduce, publish, or otherwise use, and to authorize others to use, all copyrighted material and all material which can be copyrighted resulting from this grant. It is further agreed that in any material prepared under this grant under which a license is reserved to the Government under the preceding sentence, the following language shall be added plainly in the vicinity of the copyright: "Reproduction by the U.S. Government in whole or in part is permitted for any purpose."

21. REVOCATION

a. This grant may be revoked in whole or in part by the grant officer after notice to the grantee, except that a revocation shall not affect any financial commitment which in the judgment of the grant officer had become firm prior to the effective date of the revocation. Upon notice of revocation, the grantee shall make no new commitments and shall cancel and otherwise reduce, insofar as possible, the amount of outstanding commitments and repay to the grant officer, by check payable to the

U.S. Department of Labor, the uncommitted balance of all funds that have been paid to the grantee under the terms of this grant.

b. The grantee shall communicate with the grant officer whenever it has reason to believe that circumstances may necessitate revocation of the grant. It is expected that the most common cause for revocation will be the inability of the grantee to carry out the program for which the grant was made, or inability to adhere to the other conditions set forth in the grant instrument.

22. AVAILABILITY OF THE DIRECTOR

The full-time availability for grant activities of the services of the persons named in the notice of grant as "Director" is one of the conditions of the grant. Grantee agrees to inform the Government immediately whenever it appears to be impossible for the director to continue to work full time on the project as planned. Under such circumstances the grant may be revoked unless a substitute is approved by the grant officer.

23. CONTRACTS

a. Unless otherwise provided herein, prior written approval shall not be required for the purchase, lease, or rental by the grantee of articles, supplies, equipment, and services which are both necessary for and merely incidental to the performance of the work required under this grant, except that the following shall require such prior approval of the grant officer:

(1) Purchase of items of property or equipment having a unit value exceeding $1,000;

(2) Contracts and purchase orders exceeding 5 percent of the total estimated cost of this grant;

(3) Cost, cost-plus-a-fixed-fee, time-and-material, or labor-hour basis contracts; or

(4) The purchase of any motor vehicle or airplane. Nothing herein, however, shall be deemed to provide for the incurrence of any obligation of the Government in excess of estimated cost set forth in this grant or be construed to constitute a determination of the allowability of such cost. The grantee shall not enter into any agreement, under this grant, which provides for payment on a cost-plus-percentage-of-cost basis.

b. The grantee will give the Government immediate notice in writing of any action or suit filed, and prompt notice of any claim made against the grantee by any party with whom the grantee has entered into a subcontract and which, in the opinion of the grantee, may result in litigation related in any way to this grant.

24. EQUAL OPPORTUNITY

(The following clause is applicable unless this grant is exempt under the rules, regulations, and relevant orders of the Secretary of Labor (41 CFR, ch. 60).)

During the performance of this grant, the grantee agrees as follows:

a. The grantee will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The grantee will take affirmative action to insure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The grantee agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the grant officer setting forth the provisions of this equal opportunity clause.

b. The grantee will, in all solicitations or advertisements for employees placed by or on behalf of the grantee, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

c. The grantee will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding a notice, to be provided by the agency grant officer, advising the labor union or workers' representative of the grantee's commitments under this equal opportunity clause, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

d. The grantee will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

e. The grantee will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Department of Labor and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

f. In the event of the grantee's noncompliance with the equal opportunity clause of this grant or with any of the said rules, regulations, or orders, this grant may be canceled, terminated, or suspended, in whole or in part, and the grantee may be declared ineligible for further Government grants or contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

g. The grantee will include the provisions of paragraphs a. through g. in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The grantee will take such action with respect to any subcontract or purchase order as the Department of Labor may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, that in the event the grantee becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the grantee may request the United States to enter into such litigation to protect the interests of the United States.

25. POLITICAL ACTIVITY

No funds provided hereunder shall be used for any partisan political activity or to further the election or defeat of any candidate for public office, and no part of the administration of the program authorized by this grant shall be intermingled with or closely affiliated with any partisan political activity. In addition, it should be noted that employees of public bodies and Community Action agencies may be subjected to limitations on their political activities under the Hatch Act (5 U.S.C. 1502(a), 18 U.S.C. 595).

26. BUY AMERICAN ACT

a. In acquiring end products, the Buy American Act (41 U.S.C. 10(a)(d)) provides that the Government give preference to domestic source end products. For the purpose of this clause:

(1) "Components" mean those articles, materials, and supplies which are directly incorporated in the end products;

(2) "End products" mean those articles, materials, and supplies which are to be acquired under this grant for public use; and

(3) A "domestic source end product " means:

(a) an unmanufactured end product which has been mined or produced in the United States, and

(b) an end product manufactured in the United States if the cost of components thereof which are mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. For the purpose of this a. (3) (b), components of foreign origin of the same type or kind as the products referred to in b. (2) or (3) of this clause shall be treated as components mined, produced, or manufactured in the United States.

b. The grantee agrees that there will be delivered under this grant only domestic source end products, except end products:

(1) Which are for use outside the United States;

(2) Which the Government determines are not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality;

(3) As to which the Secretary determines the domestic preference to be inconsistent with the public interest; or

(4) As to which the Secretary determines the cost to the Government to be unreasonable.

(The foregoing requirements are administered in accordance with Executive Order No. 10582, dated December 17, 1954.)

27. COVENANT AGAINST CONTINGENT FEES

The grantee warrants that no person or selling agency or other organization has been employed or retained to solicit or secure this grant upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the grantee for the purpose of securing business. For breach or violation of this warranty, the Government shall have the right to annul this grant without liability or, in its discretion, to deduct from the grant award, or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

28. OFFICIALS NOT TO BENEFIT

No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this grant, or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this grant if made with a corporation for its general benefit.

29. DISCLAIMER OF LIABILITY

Liabilities for the project supported by this grant are that of the grantee and not the Federal Government, which assumes no liability with respect to accidents, illnesses, or claims arising out of the grant. Accordingly, the grantee is advised to take such steps to insure or protect itself as it may deem desirable.

U.S. DEPARTMENT OF LABOR

INSTITUTIONAL GRANT AWARD: Under authority of the Manpower Development and Training Act of 1962 (42 U.S.C. 2571)

GRANT NO: ____________ GRANT PERIOD: From ____________ through ____________

PROPOSAL: Number ______ Title:

GRANTEE:	PROGRAM DIRECTOR:

APPROVED BUDGET FOR THE AWARD PERIOD:*

INITIAL PAYMENT (See Condition 8)	$____________
TOTAL AMOUNT OF THIS GRANT	$____________
TOTAL GRANTEE CONTRIBUTIONS	$____________
TOTAL PROJECT COST	$____________

* Detailed budget is set forth in approved Grantee proposal.

Progress Report to be Submitted (See Condition 18): March 31, 1971

CONDITIONS: This Grant is made in support of the Project described in the proposal which is part of this Grant and is incorporated as Attachment 1, and is made subject to the Conditions 1 through ____ set forth in Attachment 2, except Condition(s) ____, which is (are) deleted.

Grantee accepts this Grant and the conditions of its approval.	Secretary of Labor, U.S. Department of Labor.
BY: ____________	BY: ____________
TITLE: ____________	TITLE: Associate Manpower Administrator
DATE: ____________	DATE: ____________

U.S. DEPARTMENT OF LABOR
MANPOWER ADMINISTRATION

4.3 GUIDELINES FOR SUBMISSION OF RESEARCH PROPOSALS —Doctoral Dissertation Grants Under the MDTA

Academic institutions offering doctoral degrees in areas of study which relate to the manpower field (such as economics, sociology and social work, psychology, education, and the behavioral sciences generally) may apply for grants to support dissertation research of graduate students who have completed all requirements for the doctoral degree except the doctoral dissertation, or who will have met these requirements before the grant is effective. A separate application must be submitted for each candidate nominated by the university for a grant. Such a grant will be made to the university in the name of the candidate.

GRANT CONDITIONS

The maximum amount of direct costs (see "The Application," paragraph 5.a., p. 223) of any one grant is $10,000 for a period not to exceed 1 year. For projects scheduled to require more than 1 year, support may be given through renewals of grants for a total of not to exceed 3 years, subject to availability of appropriated funds, receipt of progress reports showing reasonable progress, and requests for such renewals to be submitted not later than 1 month before the expiration of previous grants. The initial grant will indicate the period for which the Department intends to support the project.

The grant may cover the following costs:

1. Support for the doctoral candidate.
    a. Support will generally be on a stipend basis, determined by the proportion of time spent by the candidate on his dissertation times the following full-time annual stipend rates:

Single individual	$4,000
Dependent allowances (additional)	
Dependent spouse	500
Dependent children:	
1	500
2	800
3 (maximum)	1,100

Under this schedule the maximum annual stipend rate for a married candidate with a dependent spouse and three or more dependent children is $5,600. The following example illustrates how a stipend may be computed:

A married man with one child who teaches half time and works on his dissertation half time for 9 months of the year, and devotes full time to his dissertation the other 3 months could receive a stipend of $3,125—three-fourths of the year at half time, $1,875, plus one-fourth of the year at full time, $1,250.

b. A candidate who has been regularly employed in teaching or research activities by the sponsoring university or a related research organization, and for whom the dissertation research requires relief from part or all of his employment, may be supported at his established rate of pay, prorated for the proportion of his time devoted to the dissertation.

2. Major direct project costs, such as clerical assistance, necessary travel, computer time, and special supplies.

3. Indirect costs at a fixed rate not to exceed the established audited rate of the institution. The stipend may not be treated as a personnel cost for the purpose of computing the amount of indirect costs. However, the salary of a candidate employed by the university (as in 1.b. above) will not be considered a stipend.

4. Allowance to sponsoring university.

a. When the candidate is on a stipend basis, and is not charged tuition or fees, an allowance of $2,500 will be granted to the university in lieu of tuition, fees, general supplies, and other administrative costs for grants of 6-months' to 1-year's duration. For grants of less than 6 months, the allowance will be $1,250, except that for extensions or renewals of grants beyond the first year, the allowance will be prorated on a monthly basis. In accordance with the requirements of Bureau of the Budget Circular No. A–74 (see below), costs of services of academic and administrative staff, including the candidate's sponsor or thesis advisor, which would normally be covered by tuition and fees of the university, may not be shown as a contribution of the university.

b. When the candidate is employed by the university and paid a salary, no allowance will be granted. In such instances, the university may include the salary of the candidate in the base against which indirect costs rates may be applied.

In accordance with the Bureau of the Budget Circular No. A–74, dated December 13, 1965: "Participation in the costs of research supported by Federal grants," the grantee institution must share in the total cost of the project on "more than a token basis."

For applications which are approved, 10 copies of the final report resulting from the research will be required. Incorporated into or accompanying this report will be a short summary, which includes one paragraph on the project's objectives, one on procedures, two or three paragraphs on findings, and one on implications of findings. For projects extending beyond 1 year, each renewal will be considered as a separate grant, and a progress report will be required with the request for renewal.

Any survey plans, surveys, or questionnaires arising from the research under an approved grant will be identified solely as the responsibility of the university or the doctoral candidate, and will in no way be attributed to the Department of Labor.

Publications based on the research conducted under the grant will acknowledge that the research was supported by a grant from the Manpower Administration of the U.S. Department of Labor under the Manpower Development and Training Act of 1962, as amended. The Department will have a nonexclusive right to publish and distribute the final report of the research and to use the findings, including any research designs developed by the research, for any purpose whatsoever.

The standard conditions applying to all dissertation grants are appended as

Conditions Governing Grants in Support of Doctoral Dissertations at the end of these guidelines. As indicated below, any desired exceptions from these conditions should be stated with the transmittal of the application.

SUBMISSION OF APPLICATIONS

Fifteen copies of each application should be sent by the university to:

Director, Office of Manpower Research
Manpower Administration
U.S. Department of Labor
Washington, D.C. 20210

Closing dates for applications are January 1, April 1, July 1, and October 1. Applications will be accepted which are postmarked or delivered on or before each of these dates for work to be conducted or initiated during the 1-year period following the date of the application. However, applications received in MA 1 week or more after a closing date, regardless of postmark, will be considered at the next scheduled closing date. Processing of applications requires approximately 2 months, including evaluation by review panels. Applicants may expect to be notified of action taken about 2 months after the applicable closing date. Applications approved for funding may be activated for work to begin approximately 1 month after notification. A grant approved for a candidate who has not completed all the requirements for the doctoral degree at the date of the application will require notice from the university that all requirements have been met before any payments will be made under the grant.

CRITERIA FOR APPROVAL

All applications are reviewed by a panel of persons from outside the Department with expertise in the manpower field. Only those applications which propose studies which have relevance to the objectives of title I of the Manpower Development and Training Act[2] are referred to the panel for their consideration and recommendation.

The panel considers all elements of an application in its review, giving primary emphasis to the candidate's ability, originality, and creativity as evidenced by the project proposal. The standing of the candidate and his proposed project relative to other candidates and to the availability of funds for the program determines whether the project will be approved for a grant. Approval may be conditional on acceptance of changes as recommended by the review panel, including substantive and budget revisions.

THE APPLICATION

Applications should contain the information requested below in the order indicated. There is no printed form to be used.

1. The first page should show the following:

PROPOSAL SUBMITTED TO THE ASSOCIATE MANPOWER ADMINISTRATOR FOR POLICY, EVALUATION, AND RESEARCH, MANPOWER ADMINISTRATION, U.S. DEPARTMENT OF LABOR, FOR A GRANT IN SUPPORT OF A DOCTORAL DISSERTATION UNDER

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[2] It is suggested that applicants study title I of the MDTA of 1962 **before preparing** proposals under these guidelines. (See p. 253.)

THE PROVISIONS OF TITLE I OF THE MANPOWER DEVELOPMENT AND TRAINING ACT, PUBLIC LAW 87–415, AS AMENDED.

Submitted by: (Legal name of university which will be used if grant is approved, and department sponsoring the candidate.)

Address: (Of university, including zip code.)

Candidate: (Name, address, and phone number. Candidate should sign original or master copy.)

Project title: (Concise, descriptive, and as specific as possible.)

Sponsor: (Name, position, academic degrees, and phone number of university advisor or sponsor of the candidate. Sponsor should sign original or master copy.)

Transmitted by: (Name, position, and phone number of approving official. This should be someone with authority to commit the university, and he should sign the original or master copy. Unless otherwise indicated, all correspondence, including the Notice of Grant Award, if approved, will be addressed to this official.)

Date: (Date transmitted.)

2. The background of the candidate. Include statement of education and employment experience, and a list of published work. Indicate if candidate has met all requirements other than the dissertation, and, if not, when these will be met.

3. A statement by the candidate's sponsor in support of the proposal and indicating his evaluation of the interests and potential of the candidate. Where the sponsor is other than the thesis advisor for the candidate, the thesis advisor should also include such a statement.

4. A brief, but reasonably complete, statement of the proposed work prepared by the candidate, and covering:

   a. The problem to be investigated, and its importance and significance.

   b. The objectives of the study, including hypotheses to be tested and specific questions to which answers will be sought.

   c. Procedures to be used. Include, as appropriate, general design, population and sample to be studied, data to be gathered and methods to be used, and methods of analysis to be used.

   d. A time schedule for the project and its major phases. This may extend beyond the 1-year limit on the initial grant as a basis for additional grants.

   e. Where support of other agencies is necessary for the successful completion of the objectives of this study, include a statement of the extent of cooperation already assured by such agencies.

5. A budget statement, in detail for the current year, with tentative totals for additional years, if any. Detailed budgets will be required as part of each re-

newal application. Items to be shown in detailed budgets are listed below. Dollar amounts are to be listed in two columns: (a) Amounts of funds requested and (b) amounts of the grantee institution's contribution from non-Federal funds.

a. Direct costs.

(1) Personal services. Show the portion of the candidate's time to be spent on the project, and the rate of stipend or salary.

(a) If a stipend, indicate the basis for the rate used in accordance with schedule of stipends shown earlier in these guidelines.

(b) If a salary, indicate the basis for the recommended rate of pay.

(2) Major materials and special supplies required for the project. Itemize in broad categories and amounts.

(3) Travel, including subsistence at actual cost but not to exceed that allowable under the customary practice of the grantee. Give detail of travel and subsistence, including types of transportation to be used and rates allowed therefor.

(4) Communication and services not included elsewhere. Itemize by broad categories and amounts. For computer use, show type, number, cost per hour, etc.

(5) Other direct costs. Itemize by category and amount. When the candidate is on a salary basis, tuition and fees normally paid to the institution by doctoral candidates working only on their dissertations may be shown as a contribution of the institution in lieu of personal and other services covered by such tuition and fees (as for example, the time spent by the candidate's sponsor supervising the work of the candidate). Such tuition and fees are allowable as part of the grant amount only to the extent that they reflect grantee costs directly attributable to the work of the candidate.

b. Indirect costs. A **fixed rate** which does not exceed the grantee institution's established audited rate may be used. Identify the basis for the established rate—the date, audit agency, and reference numbers, if any.

c. Allowance to university. See page 220 above, numbered paragraph 4 for schedule of allowances. Include in amount requested.

6. A statement acknowledging that the Conditions Governing MDTA Grants in Support of Doctoral Dissertations (which follow) have been reviewed and will be accepted if the grant is approved. Any provisions from which the institution desires exception should be clearly indicated and justified.

DOCTORAL DISSERTATION GRANT CONDITIONS UNDER THE MANPOWER DEVELOPMENT AND TRAINING ACT OF 1962, AS AMENDED

1. DEFINITIONS

As used in this grant (see Notice of Grant Award, p. 232), the following terms shall have the meaning set forth below:

a. "Secretary" means the Secretary of the U.S. Department of Labor, and the term "his duly authorized representative" means any person or persons authorized to act for the Secretary.

b. "Grantee" means the institution named in this grant as the recipient of the grant award.

c. "Grant Officer" means the person executing this grant document on behalf of the Government, and any other individual who is properly designated a representative of the grant officer and acting within the limits of his authority.

d. "MA" means the Manpower Administration of the U.S. Department of Labor.

2. APPLICABILITY OF CONDITIONS

These conditions shall be applicable to the grantee, to the doctoral candidate, and to any agency or organization which, pursuant to a contract, agreement, or other arrangement with the grantee, undertakes responsibility for any part of this grant. Exceptions to these conditions may be requested in cases where compliance with one or more of them would cause unnecessary difficulties in carrying out the approved project. A waiver of any conditions must be in writing and must be signed by the grant officer. Any such waiver must be explicit; no waiver may be inferred from the fact that the grant is responsive to an application which may have contained material inconsistent with one or more of these conditions.

3. SCOPE OF WORK

The work and/or services which the grantee shall perform shall be consistent with the proposal as approved for support by the grant officer, and shall be performed in accordance with that document which is appended as Attachment 1 to the Notice of Grant Award.

4. AMOUNT OF GRANT

The amount of the Federal grant shall not exceed the smaller of (a) the "Total Amount of This Grant" shown in the Notice of Grant Award, or (b) the amount of cash expenditures (other than grantee contributions) made by the grantee for project purposes during the grant period. For this purpose, the amount of cash expenditures shall include only expenses which are chargeable to the budget of the grantee and which are determined by the grant officer to be allowable costs under the applicable provisions of subpart 1–15.3 of the Federal Procurement Regulations (41 CFR 1–15.3).

5. USE OF GRANT FUNDS

Grant funds shall be expended only for the purpose and activities of the approved project. Adjustments within the approved budget may be made by the doctoral candidate, with the approval of the grantee without prior approval by the grant officer, provided the total expenditures do not exceed the amount of the grant and the total pay and rate of pay of the doctoral candidate are not increased. Expenses which are attributable only in part to this project shall be prorated on a reasonable and consistent basis to determine the amount chargeable to the activities supported by this grant. The following statement, signed by the authorized university or college official, will accompany the final fiscal report:

> "I certify that all payments and expenditures reported are for proper grant purposes and in accordance with the approved budgets set forth in the grant documents."

6. OBLIGATION OF GRANT FUNDS

Grant funds may not be obligated prior to or after the grant period. Obligations outstanding as of the end of the grant period may be liquidated (paid out) after the end of the grant period. Such obligations shall involve only specified commitments for which a need existed during the grant period and which are supported by approved contracts, purchase orders, requisitions, invoices, bills or other evidence of liability consistent with the grantee's purchasing procedures and incurred within the grant period. All obligations incurred during the grant period shall be liquidated within 3 calendar months after the end of the grant period, if practicable.

7. PAYMENTS UNDER THE GRANT

Payments under the grant will be made as follows:

a. The initial payment will be made in the amount set forth on the cover sheet.

b. Final payment will be made on receipt and acceptance by the grant officer of (1) the reports required under condition 17 below, and (2) a final fiscal statement accounting for all expenditures under this grant.

8. UNOBLIGATED FUNDS

Funds remaining unobligated at the end of the grant period cannot be transferred to another grant. The amount of the free or unobligated balance remaining at the end of the grant period shall be returned to the U.S. Department of Labor when the final financial report for the grant period is submitted. If savings occur in the liquidation of obligations outstanding at the end of the grant period, these become part of the unobligated balance.

9. TRAVEL EXPENSES

Expenses charged for travel shall be governed by the following:

a. Local travel by public carrier at actual costs and by privately owned automobile at the grantee's usual rate.

b. Out-of-town travel at the actual costs of rail or air fare, plus actual costs of subsistence, but not to exceed those allowable under the customary practice of the grantee, except that air travel shall be at less than first class where practicable.

10. SALARIES AND WAGES

The current policies of the grantee institution with respect to administration of salary and wages shall be applied to salaries and wages payable under this grant. The term "administration of salary and wage scales" is interpreted to mean hours of work, overtime rates, outside activities, general wage increases, and individual promotions. Consultants shall be paid at the prevailing rates, established by the institution.

11. ESTIMATE OF TIME OR EFFORT

The grantee shall maintain quarterly "Time or Effort Reports" for all professional staff rendering services under the grant. Such reports shall be prepared not later than 1 month following the end of the academic term within which the services were rendered. The estimate may be based on either hours or a percentage of effort. The estimate may be prepared by either the professional staff member himself or his supervisor and retained in the office of the individual responsible for preparation of expenditure reports. The "Time or Effort Reports" shall be available for inspection at any time by representatives of the Government.

12. LEASE-PURCHASE AGREEMENT

The grantee shall not, while using Federal funds in the performance of this grant, lease either real or personal property under terms providing, among other things, for the option to apply rent in whole or in part toward the purchase of the property being leased without prior written consent of the grant officer. Moreover, the grantee agrees to have the substance of this clause inserted in any subcontract or equivalent instrument entered into in performance of the grant.

13. EXPENSES DISALLOWED

No project funds shall be expended for:

a. The purchase of land, or any interest therein; the acquisition or construction of facilities; or the procurement of passenger-carrying vehicles;

b. The cost of meals for employees or officials of the grantee except when in travel status; or

c. Costs incurred before or after the grant period.

14. INTEREST EARNED ON FEDERAL FUNDS

All interest earned on Federal grant funds shall be reported on the financial report for the grant period and shall be returned by check payable to the U.S. Department of Labor.

15. ACCOUNTING FOR PROPERTY

Title to all property furnished by the Government or acquired with grant funds remains in the Government. Upon completion of the project, the grantee shall make a report to MA itemizing all nonconsumable property acquired with grant funds. The grant officer at that time will determine the disposition to be made of such property.

16. ACCOUNTING PROCEDURES AND AUDIT

Accounting for grant funds will be in accordance with grantee institution accounting practices, consistently applied, regardless of the source of funds. Itemization of all supporting records of grant expenditures, including grantee contributions, must be in sufficient detail to show the exact nature of the expenditures. As required by the Bureau of the Budget Circular A-74, December 13, 1965, the grantee's contribution to the project shall be not less in proportion to the total actual charges against the grant than the ratio indicated in the approved budget. Records must be available for audit by Government representatives and must be retained for 3 years after expiration of the grant or until grantee is notified by the grant officer that they may be disposed of.

17. REPORTS

Prior to the end of the grant period, grantee shall submit 10 reasonably durable, bound copies of a final research report covering the activities, research findings, implications, conclusions, and recommendations resulting from the project work. A short summary covering these subjects will either be included in or accompany the report. Said final report shall contain, either in the preface or on the title page, the following acknowledgment:

> "The material in this project was prepared under Grant No(s). (enter appropriate MA numbers) from the Manpower Administration, U.S. Department of Labor, under the authority of title I of the Manpower Development and Training Act of 1962, as amended. Researchers undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment. Therefore, points of view or opinions stated in this document do not necessarily represent the official position or policy of the Department of Labor."

18. QUESTIONNAIRE APPROVAL

No questionnaire or survey plan shall be identified as a Government study or Government-approved study, unless the grantee submits to the grant officer copies of said questionnaires and survey plans for clearance in advance of use, in accordance with the Federal Reports Act of 1942.

19. RIGHTS TO AND DISPOSITION OF DATA

The grantee may publish, cause to be published, or distribute for public consumption any information concerning the results or conclusions of research conducted under this grant, without prior review by the grant officer, provided that such publications contain the acknowledgment required by condition 17 above.

Grantee agrees to furnish 10 copies of each such publication to MA, and agrees, to the extent that the grantee has power to grant such rights, that the Government may duplicate, use, and disclose in any manner and for any purpose whatsoever, and have others so do, all data procured or reports delivered under this grant. It is understood that the grantee may not be required to disclose material of a confidential nature to the Government even though such material has been collected in the performance of this grant. If the grant results in a book or other copyrightable material, the author is free to copyright the work, but the grantee agrees that the Government reserves a royalty-free, nonexclusive, and irrevocable license to reproduce, publish, or otherwise use, and to authorize others to use, all copyrighted material and all material which can be copyrighted resulting from this grant. It is further agreed that in any material prepared under this grant under which a license is reserved to the Government under the preceding sentence, the following language shall be added plainly in the vicinity of the copyright: "Reproduction by the U.S. Government in whole or in part is permitted for any purpose."

20. REVOCATION

a. This grant may be revoked in whole or in part by the grant officer after notice to the grantee, except that a revocation shall not affect any financial commitment which in the judgment of the grant officer had become firm prior to the effective date of the revocation. Upon notice of revocation, the grantee shall make no new commitments and shall cancel and otherwise reduce, insofar as possible, the amount of outstanding commitments and repay to the grant officer, by check payable to the U.S. Department of Labor, the uncommitted balance of all funds that have been paid to the grantee under the terms of this grant.

b. The grantee shall communicate with the grant officer whenever it has reason to believe that circumstances may necessitate revocation of the grant. It is expected that the most common cause for revocation will be the inability of the grantee to carry out the program for which the grant was made or inability to adhere to the other conditions set forth in the grant instrument.

21. AVAILABILITY OF THE DOCTORAL CANDIDATE

The availability of the services of the person named in the notice of grant as "Doctoral Candidate" is one of the conditions of the grant. Grantee agrees to inform the Government immediately whenever it appears to be impossible for the doctoral candidate to continue to work on the project as planned. Under such circumstances the grant may be revoked.

22. CONTRACTS

a. Unless otherwise provided herein, prior written approval shall not be required for the purchase, lease, or rental by the grantee of articles, supplies, equipment, and services which are both necessary for and merely incidental to the performance of the work required under this grant, except that the following shall require such prior approval of the grant officer:

(1) Purchase of items of property or equipment having a unit value exceeding $250.

(2) Contracts and purchase orders exceeding 5 percent of the total estimated cost of this grant.

(3) Cost, cost-plus-a-fixed-fee, time-and-material, or labor-hour basis contracts.

(4) The purchase of any motor vehicle or airplane.

Nothing herein, however, shall be deemed to provide for the incurrence of any obligation of the Government in excess of estimated cost set forth in this grant

or be construed to constitute a determination of the allowability of such cost. The grantee shall not enter into any agreement, under this grant, which provides for payment on a cost-plus-percentage-of-cost basis.

b. The grantee will give the Government immediate notice in writing of any action or suit filed and prompt notice of any claim made against the grantee by any party with whom the grantee has entered into a subcontract and which, in the opinion of the grantee, may result in litigation related in any way to this grant.

23. EQUAL OPPORTUNITY

(The following clause is applicable unless this grant is exempt under the rules, regulations, and relevant orders of the Secretary of Labor (41 CFR, ch. 60).)

During the performance of this grant, the grantee agrees as follows:

a. The grantee will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The grantee will take affirmative action to insure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The grantee agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the grant officer setting forth the provisions of this equal opportunity clause.

b. The grantee will, in all solicitations or advertisements for employees placed by or on behalf of the grantee, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

c. The grantee will send to each labor union or representative of workers, with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency grant officer, advising the labor union or workers' representative of the grantee's commitments under this equal opportunity clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

d. The grantee will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

e. The grantee will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Department of Labor and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

f. In the event of the grantee's noncompliance with the equal opportunity clause of this grant or with any of the said rules, regulations, or orders, this grant may be canceled, terminated, or suspended, in whole or in part, and the grantee may be declared ineligible for further Government grants or contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

g. The grantee will include the provisions of paragraphs a. through g. in every subcontract or purchase order unless exempted by rules, regulations, or orders

of the Secretary of Labor issued pursuant to section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The grantee will take such action with respect to any subcontract or purchase order as the Department of Labor may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, that in the event the grantee becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the grantee may request the United States to enter into such litigation to protect the interests of the United States.

24. POLITICAL ACTIVITY

No funds provided hereunder shall be used for any partisan political activity or to further the election or defeat of any candidate for public office, and no part of the administration of the program authorized by this grant shall be intermingled with or closely affiliated with any partisan political activity. In addition, it should be noted that employees of public bodies and Community Action agencies may be subject to limitations on their political activities under the Hatch Act [5 U.S.C. 1502(a), 18 U.S.C. 595].

25. BUY AMERICAN ACT

a. In acquiring end products, the Buy American Act (41 U.S.C. 10(a) (d)) provides that the Government give preference to domestic source end products. For the purpose of this clause:

(1) "Components" mean those articles, materials, and supplies which are directly incorporated in the end products;

(2) "End products" mean those articles, materials, and supplies which are to be acquired under this grant for public use; and

(3) A "domestic source end product" means:

(a) an unmanufactured end product which has been mined or produced in the United States;

(b) an end product manufactured in the United States if the cost of components thereof which are mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. For the purpose of this a. (3) (b), components of foreign origin of the same type or kind as the products referred to in b. (2) or (3) of this clause shall be treated as components mined, produced, or manufactured in the United States.

b. The grantee agrees that there will be delivered under this grant only domestic source end products, except end products:

(1) Which are for use outside the United States;

(2) Which the Government determines are not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality;

(3) As to which the Secretary determines the domestic preference to be inconsistent with the public interest; or

(4) As to which the Secretary determines the cost to the Government to be unreasonable.

(The foregoing requirements are administered in accordance with Executive Order No. 10582, dated December 17, 1954.)

26. COVENANT AGAINST CONTINGENT FEES

The grantee warrants that no person or selling agency or other organization has been employed or retained to solicit or secure this grant upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the grantee for the purpose of securing business. For breach or violation of this warranty, the Government shall have the right to annul this grant without liability or, in its discretion, to deduct from the grant award, or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

27. OFFICIALS NOT TO BENEFIT

No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this grant, or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this grant if made with a corporation for its general benefit.

28. DISCLAIMER OF LIABILITY

Liabilities for the project supported by this grant are that of the grantee and not the Federal Government, which assumes no liability with respect to accidents, illnesses, or claims arising out of the grant. Accordingly, the grantee is advised to take such steps to insure or protect itself as it may deem desirable.

U.S. DEPARTMENT OF LABOR

NOTICE OF GRANT AWARD: Under authority of the Manpower Development and Training Act of 1962 (42 U.S.C. 2571)

GRANT NO: ______________ **GRANT PERIOD:** From ______________ through ______________

PROPOSAL: Number ______________ **Title:**

GRANTEE:

☐ Principal Investigator

☐ Doctoral Candidate

Name: ______________________________

APPROVED BUDGET FOR THIS AWARD PERIOD:	General level of support recommended for this project following this grant period:
INITIAL PAYMENT (See Condition 7) $ ______________	Period: ______________
TOTAL AMOUNT OF THIS GRANT $ ______________	Amount: $ ______________
TOTAL GRANTEE CONTRIBUTION $ ______________	
TOTAL PROJECT BUDGET $ ______________	

CONDITIONS: This Grant is made in support of the proposal which is a part of this Grant and is incorporated as Attachment 1, and is made subject to the Conditions 1 through _____ set forth in Attachment 2, except condition(s) _____, which is (are) deleted.

Grantee accepts this Grant and the conditions of its approval.	Secretary of Labor, U.S. Department of Labor.
BY: ______________________________	BY: ______________________________
TITLE: ______________________________	TITLE: Director, Office of Manpower Research
DATE: ______________________________	DATE: ______________________________

U.S. DEPARTMENT OF LABOR
MANPOWER ADMINISTRATION

4.4 GUIDELINES FOR SUBMISSION OF RESEARCH PROPOSALS —Research Project Grants Under the MDTA

Public and private nonprofit academic institutions and research organizations may apply for grants to support research projects or research-related activities in the manpower field.

Projects approvable under this program include:

1. Research which explores new fields of inquiry.
2. Research which explores new methods of approach to existing fields of inquiry.
3. Studies which test the effectiveness of feasibility of research projects or programs.
4. Syntheses of the current state of knowledge in various research areas in order to provide guides for future programs.

Under special circumstances, grants may also be made to assist in support of research projects underwritten by other agencies, but which require additional monies to assure completion.

GRANT CONDITIONS

The maximum amount of direct cost (see "The Application," paragraph 10.a., p. 238) of any one grant is $15,000 for a period not to exceed 1 year. For projects scheduled for more than 1 year, additional grants, each within the same limitation, may be made for a total of not to exceed 3 years, subject to availability of appropriated funds, receipt of progress reports showing reasonable progress, and requests for such renewals to be submitted not later than 1 month before the expiration of previous grants. The initial grant will indicate the period for which the Department intends to support the project.

Grant funds may be expended only for the purpose of carrying out the research program as approved. In accordance with the Bureau of the Budget Circular No. A–74 dated December 13, 1965, "Participation in the costs of research supported by Federal grants," the grantee institution must share in the total cost of the project on "more than a token basis."

All grant awards are subject to the condition that the principal investigator designated in the application continues to be responsible for the conduct of the approved project for its duration. Continuation of grants in the event the principal investigator becomes unavailable will be contingent upon written approval by the Department of the person chosen by the grantee to replace the principal investigator.

For applications which are approved, 10 reproduced copies of the final report resulting from the research will be required. Incorporated into or accompanying this report will be a short summary, which includes one paragraph on the project's objectives, one on procedures, two or three paragraphs on findings, and one on implications of findings. For projects extending beyond 1 year, each renewal will be considered as a separate grant, and a progress report will be required with the request for renewal.

Any survey plans, surveys, or questionnaires arising from the research under an approved grant will be identified solely as the responsibility of the grantee, and will in no way be attributed to the Department of Labor.

Publications based on the research conducted under the grant will acknowledge that the research was supported by a grant from the Manpower Administration of the U.S. Department of Labor under the Manpower Development and Training Act of 1962, as amended. The Department will have a nonexclusive right to publish and distribute the final report of the research, and to use the findings, including any research designs developed by the research, for any purpose whatsoever.

The standard conditions applying to all research grants are appended as Conditions Governing Grants in Support of Research Projects, at the end of these guidelines. As indicated below, any desired exceptions from these conditions should be stated with the transmittal of the application.

CRITERIA FOR APPROVAL

A primary consideration in the approval of any grant request is the relevance of the area of study to the objectives of title I of the Manpower Development and Training Act.[3] Proposals which are determined to be relevant to the objectives of the Manpower Development and Training Act will be considered by a review panel of persons from outside the Department with expertise in the manpower field and approved or disapproved in relation to criteria such as the following:

1. Manpower significance
    a. The project is focused primarily on significant manpower problems.
    b. The anticipated results or methodology of the project have broad national interest. Projects limited to special areas provide a basis for generalized conclusions, or have application over a wide area.
2. Research design
    a. The problem with which the research proposes to deal is clearly defined.
    b. The proposal reflects an adequate knowledge of other research related to the problem.
    c. Questions to be answered or hypotheses to be tested are well formulated and clearly stated.
    d. The proposal outlines fully the procedures to be followed, and whenever applicable, includes information on such matters as sampling procedures, including the size of the population to be studied and the size of sample and control groups, as well as types of data to be gathered, and statistical analyses to be made.
3. Personnel and facilities
    a. The experience and training of the principal investigator appear adequate to carry out the research.
    b. The facilities available to the investigator(s) are adequate to carry out the research.

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[3] It is suggested that applicants study title I of the MDTA of 1962 **before** preparing proposals under these guidelines. (See p. 253.)

c. The plan provides, wherever feasible, for encouraging and increasing knowledge and skills of professional personnel and of new research workers.

4. Economic efficiency
   a. The suggested approach to the problem is reasonable in terms of overall cost as compared with the cost of other possible approaches.
   b. The suggested approach to problems involving the analysis of statistical data utilizes, to the extent feasible, data already available or being collected through Government and other sources.
   c. The total proposed expenditure is justifiable in terms of the probable value of the results of the proposed research, and the grantee institution is contributing a reasonable share of the total cost.

Approval may be conditional on acceptance of changes in the project or the budget, or both, as recommended by the review panel.

GRANT REVISIONS

The terms of any approved grant will be revised only if major changes in the areas to be investigated are agreed to be necessary. Changes in the research approach suggested by the development of a project or intended to expedite the achievement of its objectives, but not materially changing the scope and purpose of the study, may be made at the discretion of the grantee. Adjustments within the estimated approved budget may be made at the discretion of the grantee if the total amount of the grant and the total pay and rate of pay of the principal investigator(s) are not increased.

Prior written approval of the Department is required for:

1. Substantial changes in the scope or purpose of a study, with or without changes in the budget;
2. Any increase in the total budget for a grant;
3. Any increase in the total pay or rate of pay of the principal investigator(s); or
4. Any change in the grant period.

SUBMISSION OF APPLICATIONS

Fifteen copies of each application should be sent to:

Director, Office of Manpower Research
Manpower Administration
U.S. Department of Labor
Washington, D.C. 20210

Closing dates for applications are January 1, April 1, July 1, and October 1. Applications will be accepted which are postmarked or delivered on or before each of these dates for work scheduled to start 3 months or more following the applicable closing date. However, applications received 1 week or more after a closing date, regardless of postmark, will be considered at the next scheduled closing date. Processing of applications requires approximately 2 months, including evaluation by review panels. Applicants may expect to be notified of action taken about 2 months after the closing date. Applications approved for funding may be activated for work to begin approximately 1 month after notification.

THE APPLICATION

Applications should contain the information requested in the order indicated. There is no printed form to be used.

1. The first page should show the following:

PROPOSAL SUBMITTED TO THE ASSOCIATE MANPOWER ADMINISTRATOR FOR POLICY, EVALUATION, AND RESEARCH, MANPOWER ADMINISTRATION, U.S. DEPARTMENT OF LABOR, FOR A GRANT IN SUPPORT OF A RESEARCH PROJECT UNDER THE PROVISIONS OF TITLE I OF THE MANPOWER DEVELOPMENT AND TRAINING ACT, PUBLIC LAW 87–415, AS AMENDED.

Project title:	(Be concise, descriptive, and as specific as possible. Include key words under which project may be indexed.)
Submitted by:	(Legal name of institution or organization which will be used if grant is approved, hereinafter referred to as "organization.")
Address:	(Of organization.)
Telephone number:	(Of organization. Include area code.)
Principal investigator:	(Name, position, academic degrees, and phone number of the principal investigator.)
Transmitted by:	(Name, position, and phone number of official who is approving the submission of the proposal. This must be someone with authority to commit the organization to the proposed project. Unless otherwise indicated, all correspondence, including the Notice of Grant Award, if approved, will be addressed to this official.) (The proposal should be signed by both the principal investigator and the transmitter on the original or master copy.)
Date:	(Date transmitted.)

2. Abstract. On a single separate page submit a summary of the proposal including: (a) Title of project; (b) name of organization; (c) name of principal investigator; (d) objectives; (e) procedures; (f) time schedule, i.e., beginning and ending dates (first year total and project total if longer than 1 year).
3. Problem. Give a brief statement of the problem to be investigated, explaining its importance and significance.

4. Objectives. State the objectives of the research project, including hypotheses to be tested and specific questions to which answers will be sought. For research design studies, include the ultimate objectives of the research to be designed.

5. Relationship to other research. Cite or summarize pertinent research related to the proposed study. Present the rationale upon which the proposal is based. Indicate the uniqueness of the proposal.

6. Procedure. Describe the procedure in detail listing the steps to be followed. Include specific information on each of the following, as appropriate:

  a. General design of project.
  b. Population and sample to be studied.
  c. Data to be gathered and methods to be used.
  d. Methods of analysis to be used.
  e. Time schedule indicating length of time required for each major phase of study.

7. Personnel. Give name, title, and a brief statement of the research experience of the principal investigator, and of other key personnel.

8. Facilities. Indicate special facilities and similar advantages, including research staff resources, available to the organization.

9. Other information. Indicate other information pertinent to the proposal, including the following:

  a. Amount of financial or other support for this project from other sources.
  b. Whether this proposal has been or will be submitted to any other agency or organization for financial support.
  c. Whether this proposal is an extension of or an addition to a previous project supported by the Department of Labor or other Government agency.
  d. Whether this proposal or a similar one was previously submitted to the Department of Labor or other Government agency.
  e. Extent to which cooperation has been agreed to by agencies whose support is necessary for the successful completion of the objectives of the proposal.

10. Budget. Include a section on estimated costs of the project to be covered by the grant and by the grantee institution from non-Federal sources. Start this section on a new page.

The proposed budget will be reviewed against applicable Federal regulations, such as Bureau of the Budget Circular No. A–21, as part of the review of the proposal. Where changes are necessary for the projects which are otherwise approved, final approval will be conditional on the acceptance of these changes.

The cost of the project includes the costs of necessary direct items of expenditures incurred in its performance; it may also include an amount of overhead or indirect costs at a rate which does not exceed the grantee institution's established audited rate for such projects.

Following the categories as shown in the outline below, and rounding all amounts to the nearest dollar, list anticipated requirements for all items of expenditure in two columns: (1) Amount of funds requested, and (2) amount of the grantee institution's contribution from non-Federal funds. If the project is expected to extend beyond 1 year, indicate amounts required for each year and in total.

a. Direct costs.

(1) Personal services. Include:

(a) Salaries[4] and wages of all personnel which are directly attributable to actual performance under this grant, whether on a full- or part-time basis. (List personnel by title, man-months, and dollar amounts.)

(b) In connection with the above, but identified separately, allowances for vacation, holiday, and sick leave pay. Also include employee benefits to extent customarily provided by organization.

(c) Consultants[4] as required.

(2) Materials and supplies. Itemize in broad categories and amounts all materials and supplies which are to be directly expended in performance of the project.

(3) Travel. Include subsistence during travel at actual cost, but not to exceed that allowable under the customary practices of the grantee. Give detail of travel and subsistence, including types of transportation and rates allowed therefor.

(4) Communications. Include telephone and telegraph charges unless these are included in indirect costs.

(5) Services. Include those not specifically covered under personal services. Itemize by category and amount.

(6) Other. Itemize by category and amount. For computer use, show type, number, cost per hour, etc.

b. Indirect costs or overhead. A **fixed rate** which does not exceed the grantee institution's established audited rate may be used. Identify the basis for the established rate—date, audit agency, and reference numbers, if any.

11. A statement acknowledging that the Conditions Governing Grants in Support of Research Projects (which follow) have been reviewed and will be accepted if the grant is approved. If there are any provisions from which the organization desires exception, these should be clearly indicated and justified.

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[4] For salaries at rates of $15,000 or more per annum and for consultant fees in excess of $75 per day, include a statement establishing that each such rate is in accordance with the established compensation rates and policies of the grantee institution.

RESEARCH PROJECT GRANT CONDITIONS UNDER THE MANPOWER DEVELOPMENT AND TRAINING ACT OF 1962, AS AMENDED

1. DEFINITIONS

As used in this grant (see Notice of Grant Award, p. 247), the following terms shall have the meaning set forth below:

a. "Secretary" means the Secretary of the U.S. Department of Labor, and the term "his duly authorized representative" means any person or persons authorized to act for the Secretary.

b. "Grantee" means the institution named in this grant as the recipient of the grant award.

c. "Grant Officer" means the person executing this grant document on behalf of the Government, and any other individual who is properly designated a representative of the grant officer and acting within the limits of his authority.

d. "MA" means the Manpower Administration of the U.S. Department of Labor.

2. APPLICABILITY OF CONDITIONS

These conditions shall be applicable to the grantee and to any agency or organization which, pursuant to a contract, agreement, or other arrangement with the grantee, undertakes responsibility for any part of this grant. Exceptions to these conditions may be requested in cases where compliance with one or more of them would cause unnecessary difficulties in carrying out the approved project. A waiver of any condition must be in writing and must be signed by the grant officer. Any such waiver must be explicit; no waiver may be inferred from the fact that the grant is responsive to an application which may have contained material inconsistent with one or more of these conditions.

3. SCOPE OF WORK

The work and/or services which the grantee shall perform shall be consistent with the proposal as approved for support by the grant officer, and shall be performed in accordance with that document which is appended as Attachment 1 to the Notice of Grant Award.

4. AMOUNT OF GRANT

The amount of the Federal grant shall not exceed the smaller of (a) the "Total Amount of This Grant" shown in the Notice of Grant Award, or (b) the amount of cash expenditures (other than grantee contributions) made by the grantee for project purposes during the grant period. For this purpose, the amount of cash expenditures shall include only expenses which are chargeable to the budget of the grantee and which are determined by the grant officer to be allowable costs under the applicable provisions of subpart 1-15.3 of the Federal Procurement Regulations (41 CFR 1-15.3).

5. USE OF GRANT FUNDS

Grant funds shall be expended only for the purpose and activities of the approved project. Adjustments within the approved budget may be made by the grantee without prior approval by the grant officer, provided the total expenditures do not exceed the amount of the grant and the total pay and rate of pay of principal professional staff are not increased. Expenses which are attributable only in part to this project shall be prorated on a reasonable and consistent basis to determine the amount chargeable to the activities supported by this grant. The following statement, signed by the authorized university or college official, will accompany the final fiscal report:

> "I certify that all payments and expenditures reported are for proper grant purposes and in accordance with the approved budgets set forth in the grant documents."

6. OBLIGATION OF GRANT FUNDS

Grant funds may not be obligated prior to or after the grant period. Obligations outstanding as of the end of the grant period may be liquidated (paid out) after the end of the grant period. Such obligations shall involve only specified commitments for which a need existed during the grant period and which are supported by approved contracts, purchase orders, requisitions, invoices, bills, or other evidence of liability consistent with the grantee's purchasing procedures and incurred within the grant period. All obligations incurred during the grant period shall be liquidated within 3 calendar months after the end of the grant period, if practicable.

7. PAYMENTS UNDER THE GRANT

Payments under the grant will be made as follows:

a. The initial payment will be made in the amount set forth on the cover sheet.

b. Final payment will be made on receipt and acceptance by the grant officer of (1) the reports required under condition 17 below, and (2) a final fiscal statement accounting for all expenditures under this grant.

8. UNOBLIGATED FUNDS

Funds remaining unobligated at the end of the grant period cannot be transferred to another grant. The amount of the free or unobligated balance remaining at the end of the grant period shall be returned to the U.S. Department of Labor when the final financial report for the grant period is submitted. If savings occur in the liquidation of obligations outstanding at the end of the grant period, these become part of the unobligated balance.

9. TRAVEL EXPENSES

Expenses charged for travel shall be governed by the following:

a. Local travel by public carrier at actual costs and by privately owned automobile at the grantee's usual rate.

b. Out-of-town travel at the actual costs of rail or air fare, plus actual costs of subsistence, but not to exceed those allowable under the customary practice of the grantee, except that air travel shall be at less than first class where practicable.

10. SALARIES AND WAGES

The current policies of the grantee institution with respect to administration of salary and wages shall be applied to salaries and wages payable under this grant. The term "administration of salary and wage scales" is interpreted to mean hours of work, overtime rates, outside activities, general wage increases, and individual promotions. Consultants shall be paid at the prevailing rates, established by the institution. In exceptional cases where the required caliber of services cannot be obtained at the prevailing rates, a request to pay a higher rate, with justification therefor, shall be submitted to the grant officer for consideration and prior approval before the commitment is made.

11. ESTIMATE OF TIME OR EFFORT

The grantee shall maintain quarterly "Time or Effort Reports" for all professional staff rendering services under the grant. Such reports shall be prepared not later than 1 month following the end of the academic term within which the services were rendered. The estimate may be based on either hours or a percentage of effort. The estimate may be prepared by either the professional staff member himself or his supervisor and retained in the office of the individual responsible for preparation of expenditure reports. The "Time or Effort Reports" shall be available for inspection at any time by representatives of the Government.

12. LEASE-PURCHASE AGREEMENT

The grantee shall not, while using Federal funds in the performance of this grant, lease either real or personal property under terms providing, among other things, for the option to apply rent in whole or in part toward the purchase of the property being leased without prior written consent of the grant officer. Moreover, the grantee agrees to have the substance of this clause inserted in any subcontract or equivalent instrument entered into in performance of the grant.

13. EXPENSES DISALLOWED

No project funds shall be expended for:

a. The purchase of land, or any interest therein; the acquisition or construction of facilities; or the procurement of passenger-carrying vehicles;

b. The cost of meals for employees or officials of the grantee except when in travel status; or

c. Costs incurred before or after the grant period.

14. INTEREST EARNED ON FEDERAL FUNDS

All interest earned on Federal grant funds shall be reported on the financial report for the grant period and shall be returned by check payable to the U.S. Department of Labor.

15. ACCOUNTING FOR PROPERTY

Title to all property furnished by the Government or acquired with grant funds remains in the Government. Upon completion of the project, the grantee shall make a report to MA itemizing all nonconsumable property acquired with grant funds. The grant officer at that time will determine the disposition to be made of such property.

16. ACCOUNTING PROCEDURES AND AUDIT

Accounting for grant funds will be in accordance with grantee institution accounting practices, consistently applied, regardless of the source of funds. Itemization of all supporting records of grant expenditures, including grantee contributions, must be in sufficient detail to show the exact nature of the expenditures. As required by the Bureau of the Budget Circular A-74, December 13, 1965, the grantee's contribution to the project shall be not less in proportion to the total actual charges against the grant than the ratio indicated in the approved budget. Records must be available for audit by Government representatives and must be retained for 3 years after expiration of the grant or until grantee is notified by the grant officer that they may be disposed of.

17. REPORTS

Prior to the end of the grant period, grantee shall submit 10 reasonably durable, bound copies of a final research report covering the activities, research findings, implications, conclusions, and recommendations resulting from the project work. A short summary covering these subjects will either be included in or accompany the report. Said final report shall contain, either in the preface or on the title page, the following acknowledgment:

> "The material in this project was prepared under Grant No(s). (enter appropriate MA numbers) from the Manpower Administration, U.S. Department of Labor, under the authority of title I of the Manpower Development and Training Act of 1962, as amended. Researchers undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment. Therefore, points of view or opinions stated in this document do not necessarily represent the official position or policy of the Department of Labor."

18. QUESTIONNAIRE APPROVAL

No questionnaire or survey plan shall be identified as a Government study or Government-approved study, unless the grantee submits to the grant officer copies of said questionnaires and survey plans for clearance in advance of use, in accordance with the Federal Reports Act of 1942.

19. RIGHTS TO AND DISPOSITION OF DATA

The grantee may publish, cause to be published, or distribute for public consumption any information concerning the results or conclusions of research conducted under this grant, without prior review by the grant officer, provided that such publications contain the acknowledgment required by condition 17 above.

Grantee agrees to furnish 10 copies of each such publication to MA, and agrees, to the extent that the grantee has power to grant such rights, that the Government may duplicate, use, and disclose in any manner and for any purpose whatsoever, and have others so do, all data procured or reports delivered under this grant. It is understood that the grantee may not be required to disclose material of a confidential nature to the Government even though such material has been collected in the performance of this grant. If the grant results in a book or other copyrightable material, the author is free to copyright the work, but the grantee agrees that the Government reserves a royalty-free, nonexclusive, and irrevocable license to reproduce, publish, or otherwise use, and to authorize others to use, all copyrighted material and all material which can be copyrighted resulting from this grant. It is further agreed that in any material prepared under this grant under which a license is reserved to the Government under the preceding sentence, the following language shall be added plainly in the vicinity of the copyright: "Reproduction by the U.S. Government in whole or in part is permitted for any purpose."

20. REVOCATION

a. This grant may be revoked in whole or in part by the grant officer after notice to the grantee, except that a revocation shall not affect any financial commitment which in the judgment of the grant officer had become firm prior to the effective date of the revocation. Upon notice of revocation, the grantee shall make no new commitments and shall cancel and otherwise reduce, insofar as possible, the amount of outstanding commitments and repay to the grant officer, by check payable to the U.S. Department of Labor, the uncommitted balance of all funds that have been paid to the grantee under the terms of this grant.

b. The grantee shall communicate with the grant officer whenever it has reason to believe that circumstances may necessitate revocation of the grant. It is expected that the most common cause for revocation will be the inability of the grantee to carry out the program for which the grant was made or inability to adhere to the other conditions set forth in the grant instrument.

21. AVAILABILITY OF THE PRINCIPAL INVESTIGATOR

The availability of the services of the person named in the notice of grant as "Principal Investigator" is one of the conditions of the grant. Grantee agrees to inform the Government immediately whenever it appears to be impossible for the principal investigator to continue to work on the project as planned. Under such circumstances the grant may be revoked unless a substitute is approved by the grant officer.

22. CONTRACTS

a. Unless otherwise provided herein, prior written approval shall not be required for the purchase, lease, or rental by the grantee of articles, supplies, equipment, and services which are both necessary for and merely incidental to the performance of the work required under this grant, except that the following shall require such prior approval of the grant officer:

(1) Purchase of items of property or equipment having a unit value exceeding $250.

(2) Contracts and purchase orders exceeding 5 percent of the total estimated cost of this grant.

(3) Cost, cost-plus-a-fixed-fee, time-and-material, or labor-hour basis contracts.

(4) The purchase of any motor vehicle or airplane.

Nothing herein, however, shall be deemed to provide for the incurrence of any obligation of the Government in excess of estimated cost set forth in this grant or be construed to constitute a determination of the allowability of such cost. The grantee shall not enter into any agreement, under this grant, which provides for payment on a cost-plus-percentage-of-cost basis.

b. The grantee will give the Government immediate notice in writing of any action or suit filed and prompt notice of any claim made against the grantee by any party with whom the grantee has entered into a subcontract and which, in the opinion of the grantee, may result in litigation related in any way to this grant.

23. EQUAL OPPORTUNITY

(The following clause is applicable unless this grant is exempt under the rules, regulations, and relevant orders of the Secretary of Labor (41 CFR, ch. 60).)

During the performance of this grant, the grantee agrees as follows:

a. The grantee will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The grantee will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The grantee agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the grant officer setting forth the provisions of this equal opportunity clause.

b. The grantee will, in all solicitations or advertisements for employees placed by or on behalf of the grantee, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

c. The grantee will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency grant officer, advising the labor union or workers' representative of the grantee's commitments under this equal opportunity clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

d. The grantee will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

e. The grantee will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Department of Labor and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

f. In the event of the grantee's noncompliance with the equal opportunity clause of this grant or with any of the said rules, regulations, or orders, this

grant may be canceled, terminated, or suspended, in whole or in part, and the grantee may be declared ineligible for further Government grants or contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

g. The grantee will include the provisions of paragraphs a. through g. in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The grantee will take such action with respect to any subcontract or purchase order as the Department of Labor may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, that in the event the grantee becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the grantee may request the United States to enter into such litigation to protect the interests of the United States.

24. POLITICAL ACTIVITY

No funds provided hereunder shall be used for any partisan political activity or to further the election or defeat of any candidate for public office, and no part of the administration of the program authorized by this grant shall be intermingled with or closely affiliated with any partisan political activity. In addition, it should be noted that employees of public bodies and Community Action agencies may be subject to limitations on their political activities under the Hatch Act [5 U.S.C. 1502 (a), 18 U.S.C. 595].

25. BUY AMERICAN ACT

a. In acquiring end products, the Buy American Act (41 U.S.C. 10 (a) (d)) provides that the Government give preference to domestic source end products. For the purpose of this clause:

(1) "Components" mean those articles, materials, and supplies which are directly incorporated in the end products;

(2) "End products" mean those articles, materials, and supplies which are to be acquired under this grant for public use, and

(3) A "domestic source end product" means:

(a) An unmanufactured end product which has been mined or produced in the United States, and

(b) An end product manufactured in the United States if the cost of components thereof which are mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. For the purpose of this a. (3) (b), components of foreign origin of the same type or kind as the products referred to in b. (2) or (3) of this clause shall be treated as components mined, produced, or manufactured in the United States.

b. The grantee agrees that there will be delivered under this grant only domestic source end products, except end products:

(1) Which are for use outside the United States;

(2) Which the Government determines are not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality;

(3) As to which the Secretary determines the domestic preference to be inconsistent with the public interest; or

(4) As to which the Secretary determines the cost to the Government to be unreasonable.

(The foregoing requirements are administered in accordance with Executive Order No. 10582, dated December 17, 1954.)

26. COVENANT AGAINST CONTINGENT FEES

The grantee warrants that no person or selling agency or other organization has been employed or retained to solicit or secure this grant upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the grantee for the purpose of securing business. For breach or violation of this warranty, the Government shall have the right to annul this grant without liability or, in its discretion, to deduct from the grant award, or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

27. OFFICIALS NOT TO BENEFIT

No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this grant, or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this grant if made with a corporation for its general benefit.

28. DISCLAIMER OF LIABILITY

Liabilities for the project supported by this grant are that of the grantee and not the Federal Government, which assumes no liability with respect to accidents, illnesses, or claims arising out of the grant. Accordingly, the grantee is advised to take such steps to insure or protect itself as it may deem desirable.

U.S. DEPARTMENT OF LABOR

NOTICE OF GRANT AWARD: Under authority of the Manpower Development and Training Act of 1962 (42 U.S.C. 2571)

GRANT NO: ______________ GRANT PERIOD: From ______________ through ______________

PROPOSAL: Number ______________ Title:

GRANTEE:

☐ Principal Investigator

Name: ______________

☐ Doctoral Candidate

APPROVED BUDGET FOR THIS AWARD PERIOD:

INITIAL PAYMENT (See Condition 7) ---- $__________

TOTAL AMOUNT OF THIS GRANT ---- $__________

TOTAL GRANTEE CONTRIBUTION ---- $__________

TOTAL PROJECT BUDGET ---------- $__________

General level of support recommended for this project following this grant period:

Period: ______________

Amount: $______________

CONDITIONS: This Grant is made in support of the proposal which is a part of this Grant and is incorporated as Attachment 1, and is made subject to the Conditions 1 through _____ set forth in Attachment 2, except condition(s) _____, which is (are) deleted.

Grantee accepts this Grant and the conditions of its approval.

BY: ______________

TITLE: ______________

DATE: ______________

Secretary of Labor, U.S. Department of Labor.

BY: ______________

TITLE: Director, Office of Manpower Research

DATE: ______________

APPENDIXES

This section includes a list of the members of the Subcommittee on Research of the National Manpower Advisory Committee and the text of the Manpower Development and Training Act of 1962, title I, as amended.

A. APPENDIX—Subcommittee on Research of the National Manpower Advisory Committee

The National Manpower Advisory Committee's Subcommittee on Research, appointed by the Secretary of Labor in 1962, advises the Secretary of Labor and the Secretary of Health, Education, and Welfare on a broad program of research in the field of manpower requirements, resources, utilization, and training. Members of the Subcommittee are representatives of management and distinguished social scientists in manpower-related fields.

Membership as of June 30, 1969:

William F. Whyte (Chairman)
Professor
New York State School of Industrial and Labor Relations
Cornell University
Ithaca, N.Y.

Curtis C. Aller
Professor of Economics
San Francisco State College
San Francisco, Calif.

Dennis A. Derryck
Consultant to The Ford Foundation
New York, N.Y.

Peter B. Doeringer
Assistant Professor of Economics
Harvard University
Cambridge, Mass.

Samuel Ganz
Manpower Consultant
New York, N.Y.

Robert B. Highsaw
Professor
Head of the Department of Political Science
University of Alabama
University, Ala.

Edgar M. Hoover
University Professor (Economics)
University of Pittsburgh
Pittsburgh, Pa.

Walter B. Miller
Research Associate
The Joint Center for Urban Studies of Massachusetts Institute of Technology and Harvard University
Cambridge, Mass.

Jerome Moss, Jr.
Professor
College of Education
University of Minnesota
Minneapolis, Minn.

Harold A. Richman
Assistant Professor of Social Welfare Policy
University of Chicago
Chicago, Ill.

Gerald G. Somers
Professor
Chairman of the Department of Economics
University of Wisconsin
Madison, Wis.

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Ross Stagner
Professor
Chairman of the Department of Psychology
Wayne State University
Detroit, Mich.

Hal J. Wright
Washington Representative
Standard Oil Company of New Jersey
Washington, D.C.

Eli Ginzberg (Ex Officio Member)
Chairman of National Manpower Advisory Committee
Director of Conservation of Human Resources Project
Columbia University
New York, N.Y.

B. APPENDIX—Manpower Development and Training Act of 1962, Title I, as Amended [1]

AN ACT

Relating to manpower requirements, resources, development, and utilization, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Manpower Development and Training Act of 1962".

TITLE I—MANPOWER REQUIREMENTS, DEVELOPMENT, AND UTILIZATION

Statement of Findings and Purpose

SEC. 101. The Congress finds that there is critical need for more and better trained personnel in many vital occupational categories, including professional, scientific, technical, and apprenticeable categories; that even in periods of high unemployment, many employment opportunities remain unfilled because of the shortages of qualified personnel; and that it is in the national interest that current and prospective manpower shortages be identified and that persons who can be qualified for these positions through education and training be sought out and trained as quickly as is reasonably possible, in order that the Nation may meet the staffing requirements of the struggle for freedom. The Congress further finds that the skills of many persons have been rendered obsolete by dislocations in the economy arising from automation or other technological developments, foreign competition, relocation of industry, shifts in market demands, and other changes in the structure of the economy; that Government leadership is necessary to insure that the benefits of automation do not become burdens of widespread unemployment; that the problem of assuring sufficient employment opportunities will be compounded by the extraordinarily rapid growth of the labor force in the next decade, particularly by the entrance of young people into the labor force, that improved planning and expanded efforts will be required to assure that men, women, and young people will be trained and available to meet shifting employment needs; that many persons now unemployed or underemployed, in order to become qualified for reemployment or full employment must be assisted in providing themselves with skills which are or will be in demand in the labor market; that the skills of many persons now employed are inadequate to enable them to make their maximum contribution to the Nation's economy; and that it is in the national interest that the opportunity to acquire new skills be afforded to these people with the least delay in order to alleviate the hardships of unemployment, reduce the costs of unemployment compensation and public assistance, and to increase the Nation's productivity and its capacity to meet the requirements of the space age. The Congress further finds that many professional employees who have become unemployed because of the specialized nature of their previous employment are in need of brief refresher or reorientation educational courses in order to become qualified for other employment in their professions, where such training would further the purposes of this Act. It is therefore the purpose of this Act to require the Federal Government to appraise the manpower requirements and resources of the Nation, and to develop and apply the information and methods needed to deal with the problems of unemployment resulting from automation and technological changes and other types of persistent unemployment.

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[1] 42 U.S.C. 2571 et seq. P.L. 87-415, Mar. 15, 1962, 76 Stat. 24-33, as amended by (a) P.L. 87-729, Oct. 1, 1962, 76 Stat. 679, (b) P.L. 88-214, Dec. 19, 1963, 77 Stat. 422, (c) P.L. 89-15, Apr. 26, 1965, 79 Stat. 75, (d) P.L. 89-792, Nov. 7, 1966, 80 Stat. 1434, (e) P.L. 80-794, Nov. 8, 1966, 80 Stat. 1451, and (f) P.L. 90-636, Oct. 24, 1968, 82 Stat. 1352.

Evaluation, Information, and Research

SEC. 102. To assist the Nation in accomplishing the objectives of technological progress while avoiding or minimizing individual hardship and widespread unemployment, the Secretary of Labor shall—

(1) evaluate the impact of, and benefits and problems created by automation, technological progress, and other changes in the structure of production and demand on the use of the Nation's human resources; establish techniques and methods for detecting in advance the potential impact of such developments; develop solutions to these problems, and publish findings pertaining thereto;

(2) establish a program of factual studies of practices of employers and unions which tend to impede the mobility of workers or which facilitate mobility, including but not limited to early retirement and vesting provisions and practices under private compensation plans; the extension of health, welfare, and insurance benefits to laid-off workers; the operation of severance pay plans; and the use of extended leave plans for education and training purposes. A report on these studies shall be included as part of the Secretary's report required under section 107;

(3) appraise the adequacy of the Nation's manpower development efforts to meet foreseeable manpower needs and recommend needed adjustment, including methods for promoting the most effective occupational utilization of and providing useful work experience and training opportunities for untrained and inexperienced youth;

(4) promote, encourage, or directly engage in programs of information and communication concerning manpower requirements, development, and utilization, including prevention and amelioration of undesirable manpower effects from automation and other technological developments and improvement of the mobility of workers;

(5) arrange, through grants or contracts, for the conduct of such research and investigations as give promise of furthering the objectives of this Act; and

(6) establish a program of experimental, developmental, demonstration, and pilot projects, through grants to or contracts with public or private nonprofit organizations, or through contracts with other private organizations, for the purpose of improving techniques and demonstrating the effectiveness of specialized methods in meeting the manpower, employment, and training problems

of worker groups such as the long-term unemployed, disadvantaged youth, displaced older workers, the handicapped, members of minority groups, and other similar groups. In carrying out this subsection the Secretary of Labor shall, where appropriate, consult with the Secretaries of Health, Education, and Welfare, and Commerce, and the Director of the Office of Economic Opportunity. Where programs under this paragraph require institutional training, appropriate arrangements for such training shall be agreed to by the Secretary of Labor and the Secretary of Health, Education, and Welfare. He shall also seek the advice of consultants with respect to the standards governing the adequacy and design of proposals, the ability of applicants, and the priority of projects in meeting the objectives of this Act.

Job Development Programs

SEC. 103. The Secretary of Labor shall stimulate and assist, in cooperation with interested agencies both public and private, job development programs, through on-the-job training and other suitable methods, that will serve to expand employment by the filling of those service and related needs which are not now being met because of lack of trained workers or other reasons affecting employment or opportunities for employment.

Labor Mobility Demonstration Projects

SEC. 104. (a) During the period ending June 30, 1970, the Secretary of Labor shall develop and carry out, in a limited number of geographical areas, pilot projects designed to assess or demonstrate the effectiveness in reducing unemployment of programs to increase the mobility of unemployed workers by providing assistance to meet their relocation expenses. In carrying out such projects the Secretary may provide such assistance, in the form of grants or loans, or both, only to involuntarily unemployed individuals who cannot reasonably be expected to secure full-time employment in the community in which they reside, have bona fide offers of employment (other than temporary or seasonal employment), and are deemed qualified to perform the work for which they are being employed.

(b) Loans or grants provided under this section shall be subject to such terms and conditions as the Secretary shall prescribe, with loans subject to the following limitations:

(1) there is reasonable assurance of repayment of the loan;

(2) the credit is not otherwise available on reasonable terms from private sources or other Federal, State, or local programs;

(3) the amount of the loan, together with other funds available, is adequate to assure achievement of the purposes for which the loan is made;

(4) the loan bears interest at a rate not less that (A) a rate determined by the Secretary of the Treasury, taking into consideration the average market yield on outstanding Treasury obligations of comparable maturity, plus (B) such additional charge, if any, toward covering other costs of the program as the Secretary may determine to be consistent with its purposes; and

(5) the loan is repayable within not more than ten years.

(c) Of the funds appropriated for a fiscal year to carry out this Act, not more than $5,000,000 may be used for the purposes of this section.

Trainee Placement Assistance Demonstration Projects

SEC. 105. During the period ending June 30, 1970, the Secretary of Labor shall develop and carry out experimental and demonstration projects to assist in the placement of persons seeking employment through a public employment office who have successfully completed or participated in a federally assisted or financed training, counseling, work training, or work experience program and who, after appropriate counseling, have been found by the Secretary to be qualified and suitable for the employment in question, but to whom employment is or may be denied for reasons other than ability to perform, including difficulty in securing bonds for indemnifying their employers against loss from the infidelity, dishonesty, or default of such persons. In carrying out these projects the Secretary may make payments to or contracts with employers or institutions authorized to indemnify employers against such losses. Of the funds appropriated for a fiscal year to carry out this Act, not more than $300,000 may be used for purpose of this section.

Labor Market Information and Job Matching Program

SEC. 106. (a) The Secretary of Labor shall develop a comprehensive system of labor market information on a national, State, local, or other appropriate basis, including but not limited to information regarding—

(1) the nature and extent of impediments to the maximum development of individual employment potential including the number and characteristics of all persons requiring manpower services;

(2) job opportunities and skill requirements;

(3) labor supply in various skills;

(4) occupational outlook and employment trends in various occupations; and

(5) in cooperation and after consultation with the Secretary of Commerce, economic and business development and location trends.

Information collected under this subsection shall be developed and made available in a timely fashion in order to meet in a comprehensive manner the needs of public and private users, including the need for such information in recruitment, counseling, education, training, placement, job development, and other appropriate activities under this Act and under the Economic Opportunity Act of 1964, the Social Security Act, the Public Works and Economic Development Act of 1965, the Wagner-Peyser Act, the Vocational Education Act of 1963, the Vocational Rehabilitation Act, the Demonstration Cities and Metropolitan Development Act of 1966, and other relevant Federal statutes.

(b) The Secretary of Labor shall develop and publish on a regular basis information on available job opportunities throughout the United States on a National, State, local, or other appropriate basis for use in public and private job placement and related activities and in connection with job matching programs conducted pursuant to this subsection. The Secretary is directed to develop and establish a program for matching the qualifications of unemployed, underemployed, and low-income persons with employer requirements and job opportunities on a National, State, local, or other appropriate basis. Such programs shall be designed to provide a quick and direct means of communication among local recruitment, job training and placement agencies and organizations, and between such agencies and organizations on a National, State, local, or other appropriate basis, with a view to the referral and placement of such persons in jobs. In the development of such a program, the Secretary shall make maximum possible use of electronic data processing and telecommunication systems for the storage, retrieval, and communication of job and worker information.

(c) A report on the activities and achievements under this section shall be included in the report required under section 107.

(d) Not less than 2 per centum of the sums appropriated in any fiscal year to carry out titles I, II, and III of this Act shall be available only for carrying out the provisions of subsection (b) of this section.

Manpower Report

SEC. 107. The Secretary of Labor shall make such reports and recommendations to the President as he deems appropriate pertaining to manpower requirements, resources, use, and training; and the President shall transmit to the Congress within sixty days after the beginning of each regular session (commencing with the year 1963) a report pertaining to manpower requirements, resources, utilization, and training.

INDEXES

In this section, the projects are indexed by code number according to contractor and grantee organizations and institutions; individual researchers; contract or grant numbers; and subject.

For code numbers, first digit is section number, second digit is subsection number, and last digits refer to numerical order of descriptions within each subsection.

A. INDEX–Contractor and Grantee Organizations and Institutions

(For code numbers, first digit is section number, second digit is subsection number, and last digits refer to numerical order of descriptions within each subsection.)

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